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ABSTRACT

A study analyzed and synthesized results of 62 company case studies in 18 European countries. Focus was "eWork," information-processing work carried out at a distance with extensive use of computer systems and telecommunication links. Each case study was based on several qualitative interviews with company respondents. Case studies covered both internal and outsourced eWork arrangements. Customer service and information technology (IT) were two functions in which eWork was particularly prevalent. Regarding customer service, personnel shortages or a high turnover in call center operators were a major regional push factor and motivation for relocation of customer operations; metropolitan areas had a larger pool of potential operators; rural areas lacked alternative employment opportunities; and technological facilitators that furthered delocalization of eWork were a high degree of digitization of information and electronic access to it and access to information systems and knowledge bases in which all operations and customer calls can be documented. Regarding IT, core motives for relocation were labor-market-induced or -oriented, knowledge-oriented, reduced personnel costs, and centralization to exploit economies of scale. Most relocations

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created or intensified cooperation over distance that triggered organizational and technological change, leading to higher levels of formalization and digitization of information and communication. An overview of EMERGENCE Relocation cases is appended. (YLB)

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Jobs on the Move
European case studies in relocating eWork

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Executive Summary

In 2001 the EMERGENCE[1] team carried out 62 company case studies (covering 54 relocation cases) in 18 European countries. This report presents a comparative synthesis of the results, based on a detailed analysis of the 62 case study reports.

The focus of the case studies was 'eWork', defined as information-processing work carried out at a distance with extensive use of computer systems and on the basis of telecommunication links. Each of the case study reports dealt with a transregional or cross-border relocation of eWork from a'source' location (where the eWork is coming from or where it is managed from) to a 'destination' location (where the relocated eWork is being carried out). Every case study was based on several qualitative interviews with respondents from the investigated companies (utilising the EMERGENCE guidelines that served as a research instrument).

Although eWork may take a variety of forms, including 'individualised' forms such as telehomeworking or multilocational eWork, for the purposes of this study the qualitative empirical work within the company case studies focused on work delocalisation in shared office-type premises. However, the case studies covered both internal eWork (carried out by employees of the company) and outsourced eWork arrangements. Only telemediated work in which a clear role of ICT could be detected, qualified as an object of study.

The results of the EMERGENCE 18-Country Employer Survey[2] were taken as a framework for building a corresponding sample of delocalisation cases that would be spread across a heterogenous mix of business sectors and distributed across the seven generic business functions that were identified at earlier stages of the EMERGENCE project. These seven functions and the number of relocation cases per function in our sample were:

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[1] The acronym EMERGENCE stands for 'Estimation and Mapping of Employment Relocation in a Global Economy in the New Communications Environment'.

[2] Huws U and O'Regan S, *eWork in Europe: The EMERGENCE 18-Country Employer Survey*, IES Report 380, IES, Brighton, 2001

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5.	Software development, IT-maintenance and support	14
6.	Accounting and other financial services	2
7.	HR management and training	4

One additional case deals with the delocalisation of the function of logistics.

The distribution of relocation cases in terms of outsourced versus internal solutions is about 60:40; approximately one-third of the source companies (*ie* companies from which *eWork* is being relocated) studied are SMEs, defined as having less than 200 employees. The sample of relocation cases consists of a balanced mix of 27 transregional and 24 cross-border relocations (these 24 delocalisation processes included eight transcontinental cases) as well as three mixed relocation processes (*ie* involving both a transregional and a cross-border relocation).

Background and objectives of relocation

It is often assumed that the norm in such cases is a one-off relocation of *eWork* from location A to location B (*eg* the relocation of software development to India or of call centres to regions with low wage costs). The EMERGENCE case studies show this is in fact only one of several different types within a diversified landscape of the delocalisation of *eWork*.

Taking into consideration the primary objective of the relocation as well as the background within the source company, different types of relocations can be distinguished:

- Alongside isolated rationalisation measures through which jobs in the previous location are replaced by those in another region or another country, the objective may for example be the expansion of activities or the assumption of new activities at another location.
- In addition, many relocations do not take place as isolated measures but arise from the reorganisation of a major group. Here, too, expansionary or replacement variants of relocation may occur.
- Geographical relocation may either be part of the original objective or not represent a primary aim at all and may only arise incidentally as a consequence of outsourcing to another company. Other factors that contribute to relocation decisions are company-specific competition advantages that only partly have anything to do with the location of the company. Thus, regional push or pull factors do not lie beneath every

relocation. As a consequence, the conclusions for regional policy-making cannot just be limited to aspects of location policy, *ie* to the question of attracting new *eWork* investment.

On the basis of the 54 relocation cases the following typology of large-scale eWork relocation was elaborated:

background/ cause: / primary objective:	Company reorganisation		Isolated measure	
	Concentration (Reduction)	Decentralisation (Expansion)	Complementing (Expansion)	Replacement (Reduction)
Geographical relocation	**I** Archi Bugdom Cella Cosmed Call4Dublin ITcomp Lecky Parcel Phamon Sporty	**III** Betty Crownsoft & Dunasys Globecom Hub Teleco IIA LabourOffice Madadata Softwork Citrus Paul	**V** BioBelindus Cassandra Cosmopol & Brandfree Cosmopol & Air-call GMS JOE SCC Telehealth WebMagy	**VII** Childy Flighty-Coup-Mum Qualicall Secure TNT Himmelblau
Outsourcing	**II** SCF RegioBank Technoshop Tourgoff & Eurocall	**IV** Call Bank Handitech Translate Webnet	**VI** Compass GovContact Intermed Microweb Safe Invest	**VIII** Cable Minicall Text T-Bank

(**Note:** When the EMERGENCE team started doing the fieldwork, it was decided that nicknames would to be used in the case study reports in order to ensure on the one hand that anonymity could be kept, but on the other that there would be a lively and practical working name which would avoid the anonymity and confusion which would have been caused by the use of a naked code. None of the names used are the real names of the companies, and nothing may be inferred from any accidental similarity to real company names.)

As a rule, the various types of relocation correspond to different motives although all motives given below may be or become relevant in each type of relocation. Among the considerations which form the framework within which decisions are made about the delocalisation of eWork, the following main motives can be discerned:

a) **cost savings achieved by economies of scale** (including synergy effects, harmonised procedures and standardised working methods): this is especially relevant for relocations in the course of company reorganisation

b) **cost differences between regions and/or companies** (*eg* wages, rents, taxes *etc.*): these are especially relevant when outsourcing is opted for or new destinations in pull regions are being looked for

c) **availability of labour and expertise:** these motives might even result in higher costs at the destination location, but in most cases lead to a reduction in costs too (*eg* software development in India or CEE countries).

However, these motives should not be interpreted as simple triggering forces for relocations: very often complex decision-making and interaction processes lead to the delocalisation of eWork, although at the beginning maybe only outsourcing was desired. In some cases, a single project-related relocation may turn into a more permanent relocation and hence result in a co-operation between source and destination locations; or it may be the case that coincidences, networking and previous contacts within companies or within groups of companies lead to the idea for relocation. Last but not least, a significant proportion of relocations are due to company reorganisation, where for example existing locations are used to harbour a concentrated function.

It should also be mentioned that the delocalisation of eWork is quite a far-reaching and big decision, which isn't easily made after pondering about cost differences: most companies (apart from multinationals or big companies) are still quite reluctant to go for such a decision that might hold quite a few unpredictable developments and outcomes. This finally also means that even if the diversity of relocations (which goes far beyond the oft-cited examples) seems to suggest a high level of mobility of *eWork*, it cannot be concluded from the EMERGENCE company case studies that the thesis of the 'unimportance of the location' or 'any location will do' applies. On the contrary, it is precisely the delocalising potential of new ICT that makes the characteristics of locations even more important (Huws, 1999).

Two functions, customer services and IT, are singled out in the report for special study. These emerged from the EMERGENCE employer survey as functions in which eWork is particularly prevalent and also form an interesting contrast.

The relocation of the customer service function

Crucial pull/push factor: availability of call centre operators

Personnel shortages or a high turnover in call-centre operators can be identified as a major regional push factor and motivation for the relocation of customer service operations. Sometimes the shortage of operators can arise from the concentration of too many call centres in one region and hence increased competition for staff between call centres, which in turn contributes to high labour turnover. However, these high turnover rates are also due to the often monotonous and standardised nature of the work. High labour turnover leads to exploding costs in the companies because operating and experiential knowledge, which has to be replaced

each time an operator leaves, is continually being lost. The delocalisation of the customer service function can take different routes and shapes and – not surprisingly – cost savings are a motivating factor in most cases:

- Economies of scale in the course of centralisation make it possible to spread fixed costs (for IT support, training, administration, infrastructure, *etc.*).
- Operations that go into rural regions utilise the city-rural wage differential, claim public subsidies and expect lower turnover among the operators, which again leads to lower costs.
- Developments such as eGovernment, eHealth and eBanking *etc.* aim in the long term to achieve cost savings by reducing personnel or using resources more efficiently.

In terms of location decisions, there is a significant difference between the conditions in urban areas as compared with rural ones, which affects the delocalisation strategies of companies:

a) Metropolitan areas can often rely on a larger pool of potential operators with the suitable skills (different foreign languages) and availability (flexible working hours). At the same time, the location of many call centres in these urban areas can lead to intense competition for staff, and operators becoming a scarce asset.

b) While rural areas are attractive call centre locations because lack of alternative employment opportunities ensures low staff turnover, they offer limited resources in terms of the amount and profile of available operators: rapid staff growth in times of expansion is sometimes not possible.

Next to centralisation developments there also are decentralising tendencies, which are due to mainly regional push factors, such as labour market shortages; besides, the establishment of virtual structures creates independence of location and limitation of risks, which is not possible with a single centralised location.

Technological facilitators furthering the delocalisation of eWork are:

- a high degree of digitisation of information and thus electronic access to it
- access to information systems and knowledge bases in which all operations and customer calls can be documented, through which details of all past interactions and relevant data are swiftly and effectively available for every customer contact (regardless of which operator or which site is dealing with them).

Co-operation, communication and consideration of soft issues

What seems technologically feasible in the planning phase can in reality lead to numerous obstacles and considerable problems if informal and social structures and soft issues (such as the perspectives and perceptions of those concerned) are not sufficiently taken into account. Successful delocalisation of eWork is considerably shaped by a climate of co-operation and trust between the employees at the source and destination locations and continuous knowledge and information transfer. Such a co-operative atmosphere is (in most cases) created if those concerned at the source location were actively involved in the decision-making and relocation process and if the relocation did not lead to a threat to jobs and a cutback in the content of work. In most cases, companies are convinced of the necessity for regular face-to-face meetings in order to ensure sufficient information transfer and to create an atmosphere of trust.

Quite the reverse of the much rumoured 'death of distance' in the ICT-dominated new world, the case studies analysed here reveal a number of efforts to minimise the effects of physical distance.

How long is the butterfly going to stay?

Even in the face of severe personnel shortages, many companies are reluctant to train the regional workforce, and fresher meadows elsewhere are often more attractive to butterfly companies than the improvement of the existing location. And it is precisely the high level of digitisation of information and standardisation of work processes developed for the initially relocated call centres that can act as a facilitator for potential further relocations. That means that not only experience gained from previous relocations but also the very organisation of relocated work enhance the chance of a further change of location.

The relocation of the IT function

In Europe, major labour-market shortages in IT specialists have been diagnosed in recent years. Such shortages in local labour-market segments lead to increased turnover and wage costs. If a relocation is the result of labour shortage at the previous location, it is mostly closely linked to the cost factor. On top of this, there are unattractive companies who are the first to feel it when the labour market situation is more favourable for workers. Thus companies with little to offer to IT specialists in terms of further training or career opportunities come up empty-handed when attractive companies can still afford to pick and choose.

In the context of the EMERGENCE relocation cases in IT, the following core objectives or motives for relocation were found:

- labour-market-induced or -oriented relocation
- knowledge-oriented relocation
- relocation to reduce personnel costs
- centralisation to exploit economies of scale.

In terms of employment effects in the countries the work is coming from, it is frequently argued that relocation will lead to expansion and thus the securing and creation of new jobs for software developers and IT specialists in the source countries too. In some of the case studies this development indeed came about, yet in other cases successful and long-term relocation relationships in the end also led to the replacement or the loss of jobs (although this was sometimes masked by the progressive non-replacement of leaving staff) as more tasks and responsibilities were transferred to the far-away plants.

The ten cross-border relocations of the IT function include the delocalisation of eWork to India, CEE countries, the US and Siberia, countries that are mostly much cheaper in terms of personnel costs (with the exception of the US) and that have labour markets with larger amounts of available and highly skilled IT experts.

One crucial conclusion from these studies was the importance of elaborate learning processes related to forms of division of labour, formalisation of project work, communication and cultural aspects of co-operation. In the cases studied, the considerable differences in personnel costs meant that overall cost savings were achieved despite relocation and management expenses. The extent of these savings varied greatly, however. With regard to the Indian cases, drawbacks arose from the comparatively high turnover of IT staff. The companies thus attempted to design the work so that it was attractive for the Indian software developers. From this it follows that on the one hand it is not sensible to relocate just the simple (coding) work to India. On the other hand, the relocation of customer-specific software development is difficult since it requires more intensive interaction.

Whether looking at the locations for software development in India or in Central and Eastern European countries, the general trend is towards upgrading the remote plants, in the sense that they are granted more independence and that more responsibility for whole projects is transferred to them. In India this has a lot to do with the labour market situation. Companies must endeavour to be attractive for highly qualified IT specialists. In CEE countries a trend towards upgrading software plants in order to simplify organisation and increase staff motivation can also be observed or is to be expected.

Organisational and technological demands and consequences

The delocalisation of eWork puts considerable demands on organisations. Depending on size, age and corporate culture, a company's organisational structure and work routines can either facilitate or hamper the relocation of work. In the light of the EMERGENCE company case studies the following organisational facilitators seem to be the most important ones:

- existing contacts with partner companies and support from parent companies
- clearly delineated tasks or projects including a high degree of standardisation and formalisation as well as exact specification and documentation of the eWork to be done
- workers' involvement in the preparation and running of the relocation
- adaptation of work organisation and technology to the new environment
- organisational change at the source in order to adapt to the new division of labour
- dedicated and extensive efforts regarding knowledge transfer and training.

Within relocation projects, two phases can be distinguished: phase one consists of the preparation and setting up of the destination location. Here it became obvious that large companies or multinationals have certain advantages of support, experience and contacts from parent or partner companies. In contrast, SMEs often have to build up all this from scratch. In phase two, eWork is being transferred to the destination location and a continually developing relocation relationship and co-operation emerges. In both phases, the additional work due to making tasks explicit, trying to specify them and designing rule books, training and knowledge transfer issues, conceptualising communicative and co-operative structures *etc.* should not be underestimated.

Nearly all case study reports highlight the crucial role of ICT for delocalising eWork. Regardless of the business function concerned, the dissemination and frequent use of electronic mail is making a big difference in day-to-day communication and co-operation. Although telephone and face-to-face meetings are regarded as very important for co-operating over distance, most of the respondents stated that the major part of information flow is based on email. The importance of other ICT applications varies according to function and work organisation: spatially dispersed but organisationally integrated customer service units depend on a high level of technical integration. This implies a common technical infrastructure and working on the same information

systems. Software development, accounting or design functions also often rely on information systems that can be accessed from different locations.

In most cases the relocation of eWork results in more or less intensive co-operation between the source and the destination establishments involved. While this is quite obvious for the types of decentralising and expanding relocations, the concentration of activities at one location also usually implies changed but ongoing interrelations between, for example, centralised IT or customer service units and dispersed subsidiaries of the company.

The general picture that emerges from the experiences investigated in these case studies is that most relocations create or intensify co-operation over distance, which triggers organisational and technological change processes leading to higher levels of formalisation and digitisation of information and communication. The core aspects of this change relate to the transformation of tacit experiential knowledge into explicit knowledge and a shift towards comprehensive documentation and digitisation of information relating to customer contacts, products, projects *etc.*

Employment aspects

The numbers of jobs lost or gained at a particular location depend on the type and the scale of the relocation project. As explained in more detail in chapter 2 of this report, there are two types of relocation that by definition result in job loss at the source location: concentration of activities in the context of company reorganisation and replacing relocations as isolated measures. Some of the relocations concern a considerable number of jobs. The reduction of jobs at the source location does not in all cases lead to redundancies, however. Sometimes employees are transferred to other jobs in the company and sometimes they are offered the option of moving with their jobs to the new location. When there are redundancies, negotiations on the terms are frequently made that result in more or less generous social plans regulating severance pay *etc.*

The positive employment effects at destination locations are usually limited if we look only at individual cases of relocations. The total job creation through the location of eWork, however, may be considerable. The central and eastern European countries and India are gaining employment, in particular through the relocation of software development. It can be observed that cities and metropolitan areas are gaining most while smaller towns only appear to attract IT jobs if they have an important university. Job creation through the location of call centres also favours large cities if language skills for pan-European customer service and a large pool of flexible labour are required. But the case studies also revealed a trend in the opposite direction: mono- or bilingual call centres are also being set up in, or relocated to, rural and

peripheral regions where labour turnover and wage levels are lower. In rare cases these locations have been favoured by government policies.

Call for Mobility

At the outset of the EMERGENCE project we hypothesised that the relocation of eWork could be conceived as a movement of tasks or jobs with workers at one location losing and workers at another location gaining employment. What we certainly underestimated was the movement of people involved in the relocation of eWork. Relocations put high demands on people's physical mobility. This can be the direct consequence of relocation insofar as workers have to move with their jobs if they want to keep them. In addition, companies relocating call centres often motivate employees to move to the new location to support the knowledge transfer. But there is a lot of additional mobility required: managers go abroad to set up and direct new units or companies; specialists train new workers at new locations; people co-operating over distance travel to regular meetings *etc.* In the light of our case study findings, the popular image of eWork bringing the work to where people live instead of people having to commute to work doesn't apply in many cases.

Some of the employment (and career) consequences of increasing demands on mobility are obvious: work organisation favours young, single and childless workers for jobs that involve a lot of travelling. This applies, for instance, to call-centre agents taking on employment abroad, to researchers who move with relocated laboratories as well as to project leaders who have to visit relocated software development units on a regular basis.

Sustainability of relocated eWork

Last but not least, several grounds could be found for concluding that relocated eWork offers less stable employment than comparable workplaces. First, the reasons for locating work in a particular region (whether labour market situations or relative cost advantages) may vanish; second, the very economic processes and corporate strategies that led to the relocation may lead to further reorganisations threatening the employment created through relocation; and third, organisational and technological change necessary for relocating eWork will result in work organisations and information systems that make work easier to relocate again. Thus it can be concluded that the butterfly is not likely to settle for good, both because the conditions keep changing and because fluttering from blossom to blossom becomes easier every time.

1. Introduction — Research Methodology and Company Sample

1.1 Definitions, object of research and selection criteria

The in-depth EMERGENCE company case studies are designed to capture the dynamics of employment relocation in 'source' areas, from which certain kinds of information-processing work may be migrating or from which they are managed, and 'destination' areas, which are currently attracting this type of employment.

The very large differences in the take-up of eWork cannot be explained simply in terms of technological and economic factors; social, cultural and organisational factors also play a critical role and these can only be grasped and understood by qualitative research that takes a closer look at individual relocations.

The EMERGENCE 18-country employer survey (Huws and O'Regan, 2001) found that nearly half of all establishments in Europe (49 per cent) are already practising some form of eWork. The forms of work delocalisation investigated in the survey encompass individualised forms of eWork (such as telehome-working and multilocational eWork) as well as collective types of workplace (in shared office premises). They also include both internal forms (where the work is carried out by employees of the establishment in question) and and outsourced solutions.

The qualitative empirical work within the EMERGENCE company case studies focuses only on the collective forms of eWork – those carried out by groups of workers in shared office premises. However, they cover both internal and outsourced contractual possibilities.

There are several reasons for this focus. This approach makes it possible to study both ends of a relocation at a company level, whereas delocalised eWork to individuals entails as many destination locations as there are indviduals involved. In addition, the results of the EMERGENCE employer survey supports this focus, demonstrating that delocalised eWork in shared office premises is far more frequent than individualised relocations. Despite their greater prevalence, these larger-scale forms of delocalisation have in the past been much less studied than

individual forms such as tele-homeworking, multilocational work or mobile teleworking, on which there is already an extensive literature.

Furthermore, the case studies only looked at remote eWork located in another region (NUTS1) or another country. Although the survey showed that the majority of work delocalisation takes place within regions, one of the objectives of the EMERGENCE company case studies was to investigate the pull and push factors of regions and hence transregional and cross-border relocations had to be the object of study. A focus on relocations involving a significant geographical distance also makes it possible to isolate the impacts of remoteness which might be disguised in a situation where physical travel between the locations involved was simple and frequent.

The EMERGENCE company case studies investigated eWork based on the following criteria: the relocation of information-processing work carried out with extensive use of computer systems and on the basis of telecommunication links. This means that only telemediated work in which a clear role of ICT could be detected, qualified as an object of study.

Typical examples of this kind of eWork are remote call centres (electronically linked to the client database of the company's main operation) or relocated software development: the work at the remote sites and co-operation between the two ends of the relocation relationship are enabled by the use of ICT.

Other important terms used here are 'source' and 'destination': the source company or location denotes where eWork is coming from or where it is managed from, whereas the destination company or location is where the relocated eWork is being carried out. The company case studies look at both ends of relocation relationships. In transregional relocations (*ie* those involving two different regions within the same country), one partner from the EMERGENCE research team covered both ends of the relocation within one case; in cross-border relocations two partners tried to cover the respective ends of a delocalisation process.

The fact that some relocations are covered by two partners (and hence two cases) brings about two kinds of case study, namely 'source and destination cases' and 'complementary cases' (when two partners are involved in the investigation of one relocation). Covering both ends of relocations was deemed important, as it enables a fuller and more balanced picture of relocations and can prevent an overly subjective perspective that might result from looking just at the source or destination location.

The object of the research (or basic unit of analysis) was always a business activity and not the company as a whole; this approach enables a more precise and coherent depiction of relocation processes, facilitators and barriers of delocalising eWork,

organisational solutions and telecooperations *etc.*, which would get lost in a complex blur created by investigating entire companies as such. However, the company, corporate and sectoral contexts of relocations were taken into consideration as shaping factors for the relocation of eWork.

As in the EMERGENCE employer survey, delocalised eWork was investigated in relation to seven different generic business functions:

a) sales (telemarketing and mobile sales)

b) customer service

c) data processing, typing and other forms of data input

d) design, editorial and other forms of creative or content-generating work, including research and development

e) software development, IT maintenance and support

f) accounting, debt collection and other financial services

g) human resources management and training.

In designing the sample, it was stipulated that the case studies should cover all of these business functions and be distributed as evenly as possible across all the sectors identified as relevant in the EMERGENCE surveys. It was also stipulated that the sample should not only include large companies but also SMEs (less than 200 employees): a minimum of one SME per country should be included in the overall sample of case studies.

The choice of companies under investigation was guided by the aim of balancing a heterogeneous distribution (in order to give insights into diverse prototypical forms of relocating eWork) with the possibility of discovering patterns or similarities within business functions or sectors.

Most delocalisation cases captured within the framework of this research date from the second half of the 1990s or the year 2000. References to the exact timing of relocation processes have been avoided to guarantee the anonymity of the companies investigated.

1.2 Number and geographical distribution of case studies

In recognition of the major national differences, countries have been grouped into clusters, following an adapted version of the typology of European welfare systems developed by Gosta Esping Andersen.[1] In total, 62 case studies (covering 54 relocations) were carried out in 18 European countries.

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[1] Esping-Andersen G (1990), *The Three Worlds of Welfare Capitalism*, Polity Press

Table 1.1: Company case study clusters

Region A (8)	Region B (9)	Region C (10)	Region D (13)	Region E (11)	Region F (11)
UK (6) Ireland (2)	Denmark (3) Finland, Sweden and Norway (6)	Germany (5) Austria (5)	France (5) Belgium, Netherlands & Luxembourg (8)	Greece (3) Italy (5) Spain (3)	Hungary (4) Czech Rep. (3) Poland (4)
IES (UK)	DTI (DK) and IMIT (S)	FAST (G) and FORBA (A)	CNRS (FR) and HIVA (B)	VFA (GR) IRES (IT) CIREM (SP)	ISB (H)

Source: EMERGENCE project, 2001

Region A: These English-speaking EU countries are characterised by deregulated labour markets, openness to global work cultures and what have been described as 'neo-liberal' welfare regimes. They have a high diffusion of ICTs and have been successful in attracting pan-European call centres and other forms of delocalised information-processing work.

Region B: These countries have strongly egalitarian welfare systems, a skilled workforce, a high diffusion of ICTs (of high quality and of exceptionally low-cost) and a public culture of trust. However, they appear to have been somewhat less successful in attracting new delocalised employment from other countries.

Region C: Austria and Germany have highly regulated labour markets and a strong social dialogue tradition and have been classified as 'corporatist' in their welfare regimes. In both countries there appears to be a strong risk of jobs migrating over borders into countries where wage levels are lower.

Region D: France, Belgium, the Netherlands and Luxembourg come closer to the 'corporatist' model of Germany and Austria than to the 'liberal' UK or the 'social democratic' Nordic regimes. However, they could more usefully be regarded as interesting hybrids, with each national labour market having many unique features. Belgium, the Netherlands and France have all managed to attract pan-European call centres and other forms of relocated back offices with some success.

Region E: Although labour markets in northern Italy share some of the features of their counterparts in other corporatist regulatory regimes, in general, all these countries can be grouped together in a 'Mediterranean' cluster, sharing a number of common features including a traditionally strong informal economy and face-to-face work culture.

Region F: Little research has been carried out on new forms of work in these countries which are currently candidates for EU membership and which could be characterised as transitional economies. However, it seems likely that, where the appropriate infrastructure is in place and an appropriately skilled workforce

available, these are becoming attractive destinations for telemediated information-processing work.

1.3 Methodology, fieldwork procedure and analysis

1.3.1 Objectives and research questions

The overall objectives of the EMERGENCE case studies were to investigate and identify:

- motives, enabling technologies and organisational and cultural facilitators and barriers
- relocation processes, their social consequences and employment effects and
- regional push and pull factors

of delocalisation of work on the basis of ICT.

These objectives were specified by formulating the following core research questions:

- What are the aims, the processes and the forms of relocation, the critical success factors and the costs and benefits?
  - What are companies' motives for relocating part of their activities on the basis of information and communication technology?
  - Who are the social actors involved in decisions to relocate work?
  - What are the key enabling technologies, the forms of implementation and the use of the technical infrastructure?
  - What features of organisational structure and corporate culture act as facilitators of, or barriers to new forms of working?
  - What are the HR and training issues? What are the knowledge management issues involved? Are they critical for success?
  - What are the costs and benefits? How are they assessed?
- What are the impacts, in particular the consequences for employment?
  - What are the positive or negative impacts on the local labour market in both source and destination regions?
  - What are the characteristics of the workers whose jobs are most likely to be endangered? What are the characteristics of the workers most likely to benefit?

- What are the characteristics of telemediated jobs in terms of skills level, wages, working hours, contractual arrangements *etc.*?

- Why are some regions much more successful than others in attracting information-processing work?

  - What are the factors in the national and regional environment (economic, social and political) which act as facilitators of, or barriers to, these new forms of employment?

  - What are the characteristics of source and destination regions? What are the push and pull factors?

  - What are the criteria used in selecting a location for information-processing work? What are the processes of selection and decision-making?

1.3.2 Problem-centred qualitative interviews and research instrument

The problem-centred qualitative interview was used as the main device for the empirical work for the company case studies. This type of interview is aimed at a great amount of openness to the views of the interviewees, but the usage of guidelines is methodologically possible in order to cover all topical areas deemed important by the researcher/s. Deduction and induction are intertwined within the framework of this type of interview and the theoretical concepts of the researcher/s are continually shaped, tested well and reshaped during the interviewing.

The research questions listed above were used for the construction of the guidelines for qualitative interviewing. FORBA elaborated this research instrument and distributed the draft versions of the guidelines to all EMERGENCE partners and subcontractors for critical comments and feedback (which were then used to improve the instrument). All EMERGENCE partners and subcontractors involved in the research then worked with these guidelines.

Since the quality of the case study work greatly depended on each researcher on the EMERGENCE team having a similar perspective and actually investigating the questions corresponding to the case study objectives, it was a central requirement that all partners use the same research instrument and work with the same report structure. The partners' meetings (which preceded the actual fieldwork stage) were also very constructive as the discussions (about methodology, research instrument, selection of cases, definitions of telemediated work *etc.*) played an enormously important role in establishing a common mindset and shared understanding of the interviewing and interpreting to be done.

1.3.3 Company case studies under way

The original plan of carrying out 60 in-depth or full case studies had to be adapted in the course of negotiating the project budget: due to budgetary limitations it was agreed that only half of the case studies would be in-depth ones and the other half small ones. These two types of cases were defined as follows:

- *Full case studies*: six interviews plus company documents and other material (*eg* regional data on the economic situation and development, employment situation) which make it possible to produce a comprehensive picture. Different hierarchical levels and perspectives should be covered by the interviews; within one case study the following distribution of respondents was suggested to create a case study:
  a) general management
  b) controlling management
  c) heads of department/business function being researched
  d) workers' representatives/works council/trade unions
  e) human resource management
  f) key workers (who can provide the researchers with some insights into the work processes and the eWork being relocated), *eg* IT managers, facilities managers, members of teams which initiated the new working arrangements and so on.
- *Small or secondary case studies*: one or two interviews plus written material (*eg* company documents and website, information about the regional characteristics, business sector, *etc.*)

The distribution between these two types of case study should be about 50:50.

The selection of cases was discussed and finetuned between the EMERGENCE researchers all over Europe and the case-study co-ordinator, FORBA, to ensure an even and balanced spread across functions and sectors; the partners were asked to deliver case study company lists for their respective countries and to inform the co-ordinator about changes (resulting from progress or setbacks in negotiating company access). Thereby a matrix of sectors and business activities that could be filled with company case studies emerged in the course of the fieldwork stage.

1.3.4 Individual case study analysis and report

The interviews were taped and transcripts were used for interpretation and analysis. The transcripts of each interview were subjected to a reductive qualitative content analysis following a report structure developed by FORBA (based on the topics

covered by the interview guidelines). For each case study, a report of about 15 pages was written by the respective research teams. All researchers were equipped with a detailed report structure to make sure everybody was applying the same perspective for interpretation and to facilitate comparative analyses at a European level.

In addition to these reports, a questionnaire was designed which functioned as a standardised summary of each case; the researcher/s had to fill out one questionnaire for each completed case. The answers to the questionnaires were fed into a database that provided helpful orientation for the qualitative analyses of all cases.

1.3.5 Comprehensive European case study analysis

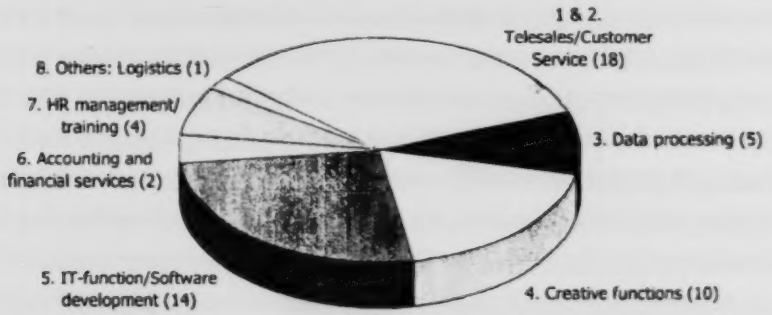
All case study reports plus questionnaires (case study summaries) were delivered to the co-ordinator, FORBA. First the cases were read and ordered according to the investigated business function, sector and most striking characteristics; second a thematic structure was elaborated (closely related to the objectives and research questions) and case study clusters based on similar processes/solutions/background developments *etc.* could be connected to this structure. Similar to the analysis of the individual case studies, another reductive content analysis was carried out (this time on the basis of condensed reports rather than the original interview material); thus it was possible to fill the diverse and multifaceted delocalisation landscape with subtopics and case-specific details.

1.4 Description of the sample

Some cross-border relocations were covered by two partners and are thus made up of two complementary case studies (a complementary case study only covers either the source or the destination end of the relocation). Thus 54 delocalisations were investigated (of 62 case studies in total) and these are the basis for looking at business functions and distribution of sectors.

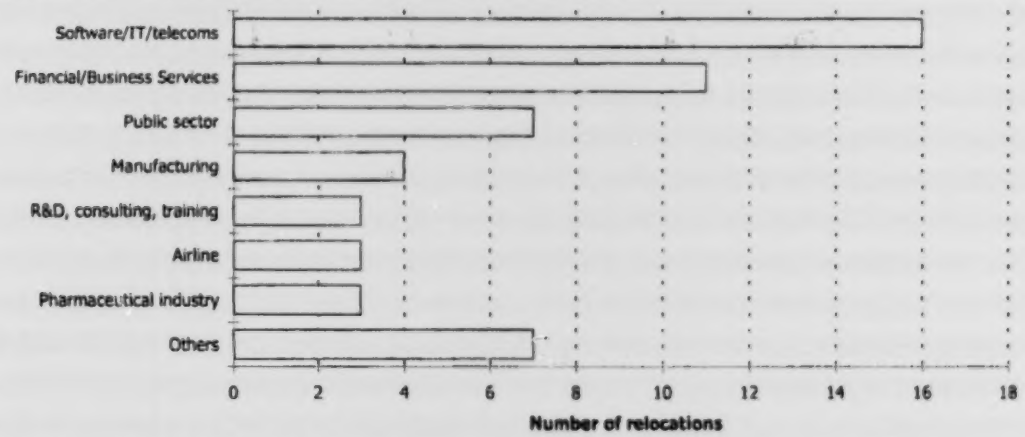
Figures 1 and 2 show the distribution of relocation cases according to business function and sector of source company. 'Others' refers to one relocation case in each of the following sectors: publishing, architecture, tourism, entertainment, retail, utilities, logistics. The distribution of delocalisation cases in terms of outsourced versus internal solutions is about 60:40; approximately one-third of the source companies studied (*ie* those from which eWork is being relocated or managed) are SMEs, defined as having less than 200 employees.

Figure 1: Distribution across business functions



Source: EMERGENCE project 2001

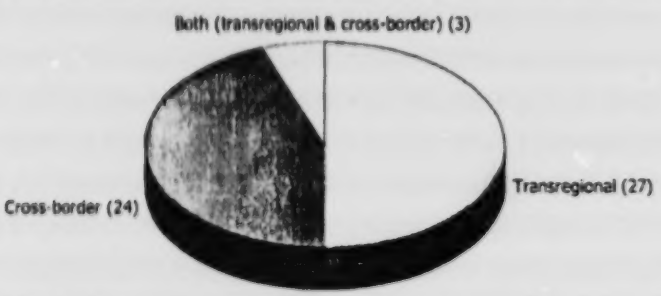
Figure 2: Distribution across sectors, of source companies



Source: EMERGENCE project 2001

Figure 3 below shows the geographical distribution of the investigated relocation cases – across the categories cross-border and transregional. As can be seen, the 24 cross-border relocations include eight transcontinental cases.

Figure 3: Geographical distribution of relocation cases



Source: EMERGENCE project 2001

2. Background and Objectives of Relocation

In this chapter we give an overview of the diverse forms that the delocalisation of eWork can assume. In addition, the background to relocation measures and their specific causes will be described. In order to make the presentation of the emerging diversity of relocations easier, we have chosen a typifying methodology. The circumstances found in reality are thereby consolidated into real types on a theoretical basis. For greater clarity, case study material is again drawn upon in the presentation, and individual examples are elaborated on by way of illustration.

The study of the delocalisation of eWork using case studies in the framework of the EMERGENCE project was based on assumptions gained from preparatory work and from the literature on globalisation, internationalisation and company restructuring, as well as the application of information and communications technology. Against this background, it was possible to place the relocation of eWork in the context of the theses concerning global or transnational companies seeking the most favourable world-wide location for each of their functions (Kogut, 1985; Dicken, 1992; Dunning 1993). Intensified competition in the course of globalisation and the increased profit expectations arising from the dominance of the financial markets are putting enterprises under pressure actually to exploit the cost-cutting and innovative opportunities to improve customer relations that can arise from such a distribution of functions. The attractiveness of regions and cities for new locations is measured in relation to a particular function, be it production, research and development, marketing or accounting, and no longer with regard to the demands that the whole enterprise makes on a location.

The restructuring of companies on a national, European or global level is further driven by the utilisation of economies of scale. European integration in particular makes it possible for companies to orient their activities directly at a supranational market. Costs can be cut by the merging of previously separate establishments and activities oriented toward national markets. It is indeed to be assumed that the most favourable location will be sought for the merged functions, but as a rule in such a process existing establishments are expanded and others closed, and the choice of an entirely new location is rare. In the search for a location, only a

limited number of possibilities are thereby compared with each other.

Another perspective on our theme arises if one starts from the assumption of the theses on the network company or flexible specialisation (Piore and Sabel, 1984; Castells, 1996). According to this view, companies are retreating to their core areas and seeking to outsource other functions. The co-operation between legally independent companies can be long-term or only for individual projects. The advantages arise from economies of scale or from an expertise advantage, if individual functions of a company are exercised for a range of customers. Co-operation between small and medium-sized companies within a region is described in relation to the concept of industrial districts. Outsourcing can also be related to geographical relocation.

The case studies carried out in the framework of the EMERGENCE project reveal a wide range of patterns that lead to the relocation of eWork. If one wishes to systemise these, then it should be recognised that the background to a relocation could involve either the reorganisation of a company or a relatively isolated measure. A typical example of the first case is the bundling of all IT functions and concentrating them in one of the company's locations. Clearly, decentralisation is also conceivable; that is, the relocation of a central unit to decentralised units. In the second case, that is, for relatively isolated measures, the outsourcing of software development tasks to an IT company in a different region or the search for a favourable location for a company's call centre is typical. Here there is a significant difference depending on whether the relocation is aimed at an expansion of activities, or if jobs at one location are to be replaced by jobs at another.

The case-study results also make it very clear that not every reorganisation that leads to relocation starts with the aim of shifting work into a particular region. Only in some of the studies was geographical relocation a primary objective, whereas in others outsourcing was primary and the location played a limited role or none at all.

From this we can derive a categorisation for the background and causes of relocation results (Table 2.1). Starting from this overview, we will describe the causes and reasons for the relocation of eWork and this with examples from the case studies.

When the EMERGENCE team started doing the fieldwork, it was decided that nicknames would to be used in the case study reports in order to ensure on the one hand that anonymity could be kept, but on the other that there would be a lively and practical working name which would avoid the anonymity and confusion which would have been caused by the use of a naked code. None of the names used are the real names of the companies, and nothing may be inferred from any accidental similarity to real company names.

Table 2.1 : Categorisation for the background and causes of relocation

background/ cause: / primary objective:	Company reorganisation		Isolated measure	
	Concentration (Reduction)	Decentralisation (Expansion)	Complementing (Expansion)	Replacement (Reduction)
Geographical relocation	**I** Archi Bugdom Cella Cosmed Call4Dublin ITcomp Lecky Parcel Phamon Sporty	**III** Betty Crownsoft & Dunasys Globecom Hub Teleco IIA LabourOffice Madadata Softwork Citrus Paul	**V** BioBelindus Cassandra Cosmopol & Brandfree Cosmopol & Air-call GMS JOE SCC Telehealth WebMagy	**VII** Childy Flighty-Coup-Mum Qualicall Secure TNT Himmelblau
Outsourcing	**II** SCF RegioBank Technoshop Tourgoff & Eurocall	**IV** Call Bank Handitech Translate Webnet	**VI** Compass GovContact Intermed Microweb Safe Invest	**VIII** Cable Minicall Text T-Bank

Source: EMERGENCE project 2001

2.1 Geographical concentration in the group or company network as a rationalisation strategy (I)

The first type of relocation of eWork we would like to describe here goes back to rationalisation strategies at group level. Losses or the impression of lack of efficiency might make the group headquarters initiate reorganisation of the whole enterprise or particular functions. An alternative cause might be a company merger and the resulting attempt to utilise synergies through merging of locations or changes in division of labour. Geographical concentration of activities is central to the rationalisation strategy. This therefore implies the geographical relocation of work as the primary objective, even if the reorganisation does not take place under the heading of relocation but of 'cost reduction and increased efficiency'. In contrast to the isolated measure type of relocation, this is not so much a question of finding a more favourable location for a particular activity or company unit, be it the computing centre, a call centre or accounting. It is much more a case of using ICT to concentrate work at an existing or new location and thus cash in on economies of scale.

Among the EMERGENCE case studies there are some that illustrate such a set of circumstances very clearly. These concern transnational companies that are active world wide and which

initiate reorganisation with the aim of cutting costs. This is to be achieved by consolidating previously dispersed, heavily IT-supported activities at particular locations of the company. The aim is to reduce personnel costs, expenditure on rent and investment, and to make processes more efficient or more easily controlled.

Call4Dublin

The group management of a US financial services company set its European management the objective of consolidating as many of the company's activities as possible at favourable locations in Europe. After the telephone customer service had been taken from two countries and concentrated in Dublin, the company attempted to achieve further synergy effects by partly relocating a call centre with 150 employees from a central European country to Dublin. Management was concerned about the economic losses of the central European subsidiary and the below-optimum size of the call centre. Alongside the reduction of personnel costs and the investment in new technology resulting from the relocation, tax advantages also played a role. The measure was not preceded by any feasibility studies or cost-benefit analysis; the risks were considered to be minimal.

Parcel

At the beginning of the 1990s, a global logistics company, which provides courier services, started to co-ordinate its activities in the Nordic countries. A joint management team was set up which acquired increasing responsibilities in the course of the 1990s. Even at the beginning of the 90s, all customer service centres, which were previously spread throughout one Nordic country, had been concentrated at the location of the Nordic management in that country. Alongside cost-saving, the reason was the opportunity to standardise procedures and information for customers. Around 1998, the Nordic management investigated the working methods of the departments for tracking and tracing in the four countries, which were activated if the customer service operators were unable to give the customer information on the whereabouts of a consignment. Management came to the conclusion that the harmonisation of working methods and a central unit with a greater workload would be more efficient than the previous handling of this function in the respective countries. Building on their experience with the earlier consolidation of work, the Nordic management decided to relocate all back office tracking and tracing jobs from the four national units to the location in a single Nordic country.

The case of *Cosmed* shares some features with the previous two cases. It refers to the concentration of the ICT application and support function from the 18 European countries where its subsidiaries operate, to a unit at the company's headquarters in a single European country.

These examples illustrate typical restructuring measures by transnational companies, which are utilising the increasing harmonisation and integration of markets and are going over to a more cost-effective form of organisation. In this regard, the reasons for the relocation of eWork are not different from those

which are decisive for geographical concentration of production for a supra-national market.

The situation at *ITcomp*, an international company in the IT sector, is similar. The company's growth strategy was based on buying up computer centres and incorporating them in its organisation. This involved the geographical concentration of similar functions and technical specialisation of the units. This business strategy involves constant relocation. Just as with buy-outs, mergers can obviously also be a reason for reorganisation that includes the relocation of work between company locations. This pattern is illustrated by *Archi*, an architecture business, which, after merging co-operating offices, concentrated its design activities in a Nordic country and its marketing in the UK.

The background and priorities of the company reorganisations are very heavily influenced by the specifics of the respective sector. Thus it is not only the competitive situation that gives rise to cost-cutting measures, but also the business strategy and structures, which are highly sector-specific. Thus, in the course of a fundamental reorganisation, the pharmaceutical company *Phamon* withdrew from one area of pharmacological research because of the high costs involved and outsourced this to partner companies and universities. In one area, the outsourcing strategy came up against trade union resistance. As a result, company management decided to concentrate these activities in one of its own – but relocated – research laboratories.

These examples show that the general nature of this type of relocation, namely, being part of restructuring at group level, takes different forms according to the sector and the business strategy. What these measures share is the company management's objective of achieving economies of scale through the concentration of work. Above and beyond this, concentration of one function in one plant can additionally be motivated by the fact that personnel costs, rents or taxes at this location are lower than they are at others.

2.2 Concentration and outsourcing (II)

A second type of company reorganisation and relocation also leads to geographical concentration of functions but, in contrast to that just described, involves outsourcing to another company. Above and beyond this, the cases are characterised by the fact that it is not geographical relocation but outsourcing that was the primary objective. It was thus first and foremost a question of another company carrying out the tasks, and the ultimate location of the activity was only a secondary issue.

There is not necessarily a clear-cut dividing line here. For instance, the company to which work is outsourced may be wholly or partly owned by the same company that is outsourcing the work. If it is a question of the restructuring of groups, as is the case with

the type described here, then work is very often outsourced to specialised units within the group.

SCF

In 1993, a company in the auto industry set up a separate service unit for accounts and consulting for all its plants and operations in two Southern European countries. With the objective of cutting costs, customer book-keeping, suppliers' book-keeping, financing and other tasks were relocated from all plants to the group's own company SCF at three locations in Southern Europe. SCF was now to be managed as a profit-oriented company which was also working for external customers. However, owing to the staff's limited readiness to move, it has not so far been possible to go ahead with the planned concentration of SCF at one instead of three locations.

Apart from groups, this form of centralisation of functions can be observed inside mutual associations. Credit unions or banks have established joint central accounting centres or IT service units in order to share investment costs and be able to access specific technical expertise.

Large companies, also frequently outsource particular functions to specialist companies that do not belong to the company or its particular area of influence. The background for this is the object of gaining access to specialised expertise or concentrating on the company's core concerns. In contrast to other cases of outsourcing, to be dealt with later, this type is characterised by geographical concentration in the course of company reorganisation. It is not a question of additional tasks that are outsourced, but a reduction in the spectrum of internal activity – and of jobs. Typical functions in which eWork is relocated in this way include IT, customer services, accounts and marketing.

Tourgoff

This type of relocation is very well illustrated by the following example from the sphere of the non-profit-sector. It concerns the tourist trade advertising in a European country, here called Tourland. Ten offices in various EU states have the job of marketing Tourland as a holiday destination. Responsibility for dealing with travel agencies and individual customers was previously exclusively the task of the individual national offices. Customer telephone enquiries were answered by the respective national offices and their regional branches. This decentralised organisation came up against limitations: because of the modest size of the national offices; they could not be organised more efficiently on the basis of division of labour. Tourland's tourist trade advertising considered the outsourcing and centralisation of telephone customer care and put a Europe-wide contract out for tender, for which 25 companies applied. The company Eurocall won the contract, resulting in the siting of the call centre in one European country. Now all enquiries from the ten countries are answered by this central unit, resulting in considerable economies of scale.

As in this example, and in other cases too, the company to which the work is to be outsourced, and not the particular region, is the main factor in the decision. The geographical relocation takes place according to the region in which the company is based or has its corresponding site. The features of the regions in question may indirectly play a role as competitive advantages of the company that is offering the services: thus the *Tourgoff* relocation required the perfect mastery of nine European languages at the new centralised location; the recruitment of appropriate staff is certainly not possible in all regional labour markets.

Typical of this kind of relocation is the fact that outsourcing is not an isolated measure but should be seen in relation to restructuring at company or group level. The connection between restructuring, outsourcing and geographical relocation can assume the most diverse forms. Thus an office machines company, *Technoshop*, relocated its administration to the region with the highest turnover and where the group's business division is also located. The logistics department – under pressure from the group headquarters – was outsourced to a specialist company but was not relocated along with administration. These circumstances had the effect that 40 staff did indeed change employer as a result of outsourcing, but did not change their place of work (at least not initially).

2.3 Relocation in the group in the course of expansion or decentralisation (III)

This type of relocation is characterised by an extension of the company's activities, for which a location different from the company's headquarters or main activities is chosen. Even if it were possible in principle to base the new workplaces at the same location or locations, reasons of cost or availability of labour mean that another region or another country is preferred. In contrast to the above mentioned types of delocalisation, the aim is not to cut jobs in the course of relocation. It is rather a case of creating new jobs at a different location.

Expansion into another region can also be a good way of guaranteeing or even increasing jobs, at least inside this company. This is the case if, for example, the competitiveness and total turnover of the company rises as a result of a cost-oriented establishment, and employment at the original location also benefits from it. Geographical relocation is a primary objective in this case; regional aspects are thus explicitly addressed in the decision-making phase and are directly relevant to the approach chosen.

Globecom

At the end of the '80s, a world-wide IT company based in the US established a company in India for software development. The motive for the development of an Indian subsidiary was the cost difference in software development between India and the US. In the course of one of the company's frequent restructurings, the operation in India came under the area of responsibility of one of the company's business divisions which also included a skills centre in a central European country. For this business division, the incorporation of the Indian subsidiary implied both the opportunity and the obligation to utilise the personnel capacity in India if work was to be outsourced. The motives to actually relocate work to India at project level were the shortage of qualified software developers in the central European country, the greater flexibility in terms of having the ability to quickly lay off or re-employ staff (subcontractors described as 'consultants') and the cost advantages.

Crownsoft

In an international technology group there is a plant with several thousand employees, which develops software for all areas of the group. Established in a central European country, the plant showed rapid growth. At the end of the '80s there was increased pressure on the plant to cut costs because, as a result of globalisation and the transformations in central and eastern European states, the purchasers and group headquarters saw opportunities to have software produced more cheaply in other countries. In agreement with the group management, the management of the software enterprise aimed at expanding into the newly transforming central European countries. In the course of the '90s, with the support of the parent company, existing companies were taken over and subsidiaries founded and built up in four CEE countries. This type of expansion pursues the objective of being able to shift work to locations with lower personnel costs and as a whole to stay within the limits of the maximum annual increase in costs. The actual relocation of work takes place in the framework of projects in which project managers in the central European country take staff from their Eastern neighbours into their project teams or place parts of the projects in the new locations. One can speak of a relocation in this case inasmuch as the expansion in the central European country has been stopped and any additional jobs are to be created only in other countries.

Both examples are not untypical of the software industry, with its labour-market and cost-oriented relocations. But companies in other sectors, too, relocate software development in order to exploit the lower costs in other countries. Thus a central European company, here called *Betty*, founded a subsidiary company in a CEE country in order to have a new system developed for the networking of its locations. At the source location it was not possible to find qualified IT specialists on an employment contract for a short-term development project in a medium-sized non-IT company. Security considerations, on the other hand, militated against the employment of freelancers. On the foundation of the subsidiary in the CEE country, it was possible to tap into existing

contacts with one of the local universities and the activities of the parent company in the area.

The above examples from the software industry point to a further interesting aspect: initially the relocation consists of the foundation of an enterprise in another region or another country. This, as a rule, is a visible step that the top company management will decide upon. The specific relocation of work, on the other hand, takes place on a project basis. This means that the total amount of work relocated depends on several or many separate decisions at decentralised levels. Alongside the central decision, a delocalisation thus requires the incentive inside the organisation actually to utilise the geographically remote capacities. This is an aspect we will return to when we describe relocation in the area of IT functions in detail.

Madadata

In the case of this European data processing company, the delocalisation took place during the foundation of the company. It was created in 1997 by setting up a company with five customer consultants in the European country and a business with around 200 employees in Madagascar mainly for data input. In order to gain a competitive advantage, the founders aimed to utilise the difference in wage costs between the European country and Madagascar, which are on the ratio of 1:10.

This type of relocation can also be observed in the public sector. As a result of a change in the law in a Nordic country, there was an additional task of customer advice in pension insurance. Two call centres were set up for this, with their locations being chosen, amongst other things, according to labour market perspectives. One of these was in an area that had recently suffered job losses in the public sector, and to which the government had promised compensation.

As this last example shows in particular, relocation in the course of expansion can also be seen as decentralisation. Functions that were previously exercised centrally are (additionally) moved to peripheral locations, or new tasks are not established in the former central locations or regions but in new areas.

2.4 Expansion and decentralisation through outsourcing (IV)

Some of the case studies involve the geographical relocation of eWork even when this was not included in the objectives of the original measures. In the course of the reorganisation of the company or the extension of its activities, it is decided to outsource additional activities to other companies for reasons of cost or expertise; the jobs that thus arise in other companies and in consequence in other regions are not substitutes for previous jobs.

Webnet

A large Southern European publishing house founded [redacted] an Internet company based in a Southern European city, in 1999. [redacted] offers Internet access and Internet solutions for eCommerce; it also sells advertising space for its Internet portal. The latter function has been outsourced to an advertising agency, through which [redacted] found access to its customer base. The background to the outsourcing is the concentration process in publishing and the conscious strategy of being a network company, in which as many services as possible are to be bought in from the best companies instead of being provided internally. In the outsourcing, a company was chosen with which business relations already existed; its location was unimportant.

Call Bank

A Southern European bank expanded the online services for its customers. The process included additional demands with regard to telephone support and technical advice for customers. Instead of expanding the existing internal call centre at its main base in a city in the north of the country, a second, separate call centre was decided on. In favour of this was greater availability of support, as any technical problems in one unit can be compensated for by the other. The contract was placed with a services company in which the bank has a shareholding. This set up the call centre in another city. For the bank, outsourcing had amongst other things the advantage that the staff were not paid under the collective agreement for banks, but under a different collective agreement, which involves 30 per cent lower wages. Previously, an outsourcing of the same activities to an island in the south of the country failed because of deficiencies in the technical infrastructure and because of logistical problems. The latter will now be avoided, because the call centre at the destination location has been built in the immediate vicinity of the main branch there.

Even if it concerns individual functions that are additionally carried out by the companies and selected for outsourcing, in this type of relocation, the business strategies and reorganisation measures at group level are essential to the decision to relocate, for the process and its effects.

2.5 Isolated expansive relocation (V)

The fifth type of relocation is closer to the image one has if one reads newspaper reports of the relocation of software development tasks to India or of call centres to Ireland. The cause of the relocation is not to be found at group level, nor does it arise from comprehensive restructuring measures of a major company. Rather, the background for the measure is the concrete problems of decentralised units. Thus the company's IT department or call centre may come up against capacity limits and consider outsourcing projects as a solution to the problem. However, the reason may also be an isolated requirement for eWork, for example in software development work which can be defined as a project and justifies outsourcing in view of the amount of work

involved. In the type of relocation described here as an isolated measure, the outsourced activities complement those at the original location. Existing jobs are not delocalised or replaced. Rather, new jobs are created at another location. To some extent it would not be possible to carry out the work at all without relocation.

In these complementary, isolated relocations, two variants can again be distinguished. Geographical relocation may be the primary aim, in which case the target region plays a role in the decision (type V). The primary aim may however, also be outsourcing. This means that the company offering the services is paramount, whereas the relocation to another region is a secondary effect – the region is in this case less important, and occasionally not even known to those making the decision on outsourcing (type VI).

If geographic relocation is primary, and the target region plays a role in the decision, *ie* if it is a type V relocation, then as the EMERGENCE case studies show, the measure may be based on widely varying motives of the management players:

- It is a question of overcoming capacity bottlenecks in the company – but an expansion of the existing site is very problematic because the company cannot get the desired personnel.
- Expansion is aimed for, but the costs for it on the existing location are estimated as being too high.
- Individual managers or employees of the company would like to live in a different region and are able to realise this wish because they can also open up a market there for the company.
- Public institutions expand the range of services for peripheral regions and establish jobs there.

Cosmopol

The management of a Dublin call centre for an airline was confronted with the problem that the call centre was overburdened with rapidly increasing call numbers. The difficulties of finding German-speaking staff in the local labour market was putting heavy pressure of work on those employees responsible for the German market. Because of the pressure, staff were leaving the company, leading to even greater pressure on those who remained. It was not possible to keep to the strict quality regulations of the parent group (80% answering all calls within 20 seconds) and the expanding German market could not be catered for adequately. In order to break out of this vicious cycle, relocation to a German-speaking country was considered. The availability of staff played an important role in the choice of location. The German-speaking staff already employed continue to work in Dublin; the outsourced call centre is intended to complement existing capacity.

BioBelindus

The Benelux branch of the international IT company [redacted] saw itself confronted with a shortage of information technology workers in the local labour market. Outsourcing was intended to guarantee that particular projects can be carried out at all. Because of the availability of a large number of IT workers and its reputation as a software country, relocation to India was considered. This took place, however, by outsourcing to the small Benelux company, [redacted] in the same city, which employs 30 IT workers in Chennai on projects for Benelux customers. The existing contacts with the Benelux-Indian company were decisive for the measure. Now [redacted] software developers work together with Indian workers at [redacted] On top of the expansion of capacity, there was also the objective of cutting costs by relocating to India.

The way in which the life plans of individuals can influence location decisions is shown by a continental European and a Nordic example. In the first case, one employee initially responsible on his own for customer services at a software company with a staff of 30 (located at a big city in the north of the country) wanted to return to his home region in the south of the country. As he was able to argue the case on the basis of proximity to customers, the new customer services department with himself as manager was opened in the south of the country. Similarly, a Nordic business consultant succeeded in turning her desire to move her residence, into a market-oriented relocation of her activities within the consulting company.

Isolated relocations that are linked to an extension of services and jobs can also be observed in public institutions. Thus, in the case of a Southern European health-service institution, the possibilities of eWork led to the improvement of medical care for the population on smaller islands and remote regions:

Telehealth

For a Southern European country that has a lot of populated islands and many mountainous areas, the problem has been providing sufficient medical care for the whole population. Inhabitants of remote areas often have to travel to hospital in the major cities to receive specialist treatment. In 1989, a telemedicine system was installed linking a major hospital with 39 remote health centres. The aim of the measure has been to provide regional health centres with special diagnostic and therapeutic information and to support preventative medicine. The technical infrastructure makes it possible to transmit patient data and to communicate by videoconference between the specialist in the hospital on the one hand and the patient and general practitioner in the health centre, on the other. The relocation of work here consists in the fact that patient care can take place at a distance. On the other hand, the tendency in the health centres has been for a slight increase in employment as a result of the additional services on offer.

In this type of measure it was clear from the start that there would be a geographical relocation. This was the primary aim of the measure. Isolated expansionary measures, however, may arise

even if, as mentioned above, the geographical aspect initially plays no role at all, as is described in the following.

2.6 Isolated expansionary relocation through outsourcing (VI)

In the sixth type, organisations decide to outsource particular activities to other companies on grounds of capacity, expertise, costs or even image. In contrast to the above-mentioned examples, the intention is not to relocate to a region, but to choose a company that offers the appropriate service. The decision to outsource, however, results in the work ultimately being carried out in another region or another country. To some companies it does not matter where the work thereby migrates; some do not even know with any certainty where it is being carried out.

In order to understand this type of relocation, one has to take into consideration the transnational, and division of labour, structure of many companies that offer outsourced services. As was shown in the company-reorganisation type of relocation, service providers may exploit cost differences and an international division of labour in order to make competitive bids. But yet another development forms the background to the relocation cases of this type: the networking of independent small and medium-sized companies in various countries and regions and the activities of brokers who offer project contracts and outsourcing services to some extent over the Internet. Even when only isolated measures are involved, such relocation cases are often typified by a complex structure of relationships.

Invest

At the end of the '90s the IT department of the central European branch of the international insurance company [redacted] was facing the problem of not being able to cope with the planned projects using its own personnel resources. The required Java developers were also hard to come by on the local labour market. For one project, IT specialists from the US branch of the company were called on initially, but as it became clear that it would not be possible to conclude the project successfully, the company went in search of an outsourcing partner. After some months, one was found in the form of the international software company [redacted], with more than 5,000 employees, among others in the US and in India. Until then, [redacted] had been just as unknown to the management at Invest as the other candidates were. The outsourcing of the project was an isolated measure. Only the section in one central-European country of [redacted] opened business relations with [redacted]. Alongside the above motives for the outsourcing, it is worth mentioning that software development is not among the core competences of an insurance company and that the internal department could never achieve the same specialisation for particular software products as a professional IT company could. Possible cost advantages played no role in the decision. Ultimately the work was relocated from a central European country to a country with higher personnel costs — the project being completed by the (Indian)

software developers of *Usindia* in a major city in the United States. In the outsourcing process, *Invest* did not opt for any particular region to which the work should be relocated, but chose a company with several different locations. The other candidates on the shortlist were purely Indian companies.

In a rapidly evolving situation, the employment implications cannot be predicted with certainty. If decisions about outsourcing and relocation continue to be taken on a case-by-case basis at *Invest*, the proportion of externally developed software will continue to rise. The personnel resources of the internal IT department have been reduced, in that staff leaving could not be replaced. Further projects with *Usindia* and with an Indian software company, too, are already being planned. The relocation might represent the entry into a more comprehensive outsourcing strategy. Starting as an expansionary relocation, it subsequently – unintentionally – changed into a replacement relocation through outsourcing (type VIII, see below).

Whereas the geographical aspect of relocation in the above example is shaped by the distribution of locations of the company involved, other cases are clearly more open in regard to the place to which the work migrates. Outsourcing and relocation can go through several stages, with the companies involved being independent of one another and not having lasting business relations either. An excellent example of this, which we present below, also shows the role of brokers in this market.

Intermed

A company in a European country (an agent for used printing presses) wanted to completely redesign its website, as an ever larger part of its business was taking place over the Internet. The requirements were defined and a project was put out to tender. A one-person company (in the same country) applied with the intention of having the contract actually carried out by someone else, and won the contract on the basis of its lower bid. Subsequently this one-person company sought a suitable subcontractor through the project outsourcing agency *Brighterwork*. After *Brighterwork* put the job requirements on the Internet, 12 offers came in within a week. A company in a CEE country was awarded the job, having outbid a Nordic and a British company which also made the shortlist; this company then employed programmers and web designers in western Siberia to do the job. In all, six people are employed on the sales and project management team in a city in a CEE country and 11 further people in a development office in western Siberia.

We can see very clearly from this example that the actual geographical relocation in the sense of new work at a different location represented no conscious option in the original decision at all. The players in the company undertaking the relocation are far away from choosing a particular region. Division of labour structures and geographically dispersed working in order to exploit cost advantages and to gain access to specialist knowledge

may be the rule in this sector. This can also be seen in the organisationally less complex example of *Microweb*, a Southern European company designing Internet portals and websites. The company is based in a major Southern European city and employs 60 people there. The programming activities are farmed out to companies in other regions with lower wage costs. At peak times, up to 200 programmers are employed.

Compass

A major metropolitan museum places an order with the multimedia company Compass with 15 employees based in a (medium-sized) city. The motive for the outsourcing of the development work of a multimedia guide through the museum arose from the fact that the necessary specialised knowledge was not available internally and because of the one-off nature of the project, which was not seen as justifying the creation of a permanent in-house department. The multimedia company was chosen on the basis of its skills; its location did not play a role. It would certainly have been possible to find a contractor for the project in the city where the museum is located. In fact, however, the project proved longer-term than originally envisaged and Compass continues to carry out maintenance and updating work on the site, although the work is less intensive than during the development phase.

Relocations of this type, that is, isolated expansionary measures in which the outsourcing and not the geographical relocation is the primary objective, can also be seen in public services because of the general trend to privatisation and outsourcing. In contrast to the previously mentioned examples, the Nordic pension insurance and the Southern European health service, regional aspects in the sense of labour policy motives or the aim of providing services for remote regions play no role, as the following example shows. The focus is on outsourcing. Initially, geographical relocation is an unintended consequence (although this may nevertheless result in positive consequences for the labour market in the remote region).

GovContact

A Benelux regional government set up a new citizens advice bureau. The aim was to improve the quality of information and to standardise the information provided, that is, to let everyone receive the same information regardless of the medium they use for the enquiry. Several reasons favoured the outsourcing of the telephone information service: the administration had no knowledge or experience of operating a professional call centre; an internal call centre would involve high investment costs for the technology and make big demands on the personnel department; the employment regulations for civil servants would make setting it up slower, and owing to the shorter working hours would lead to higher staffing costs. A further important reason is to be seen in the image the establishment was attempting to project, which should have as little as possible to do with government bureaucracy. The contract to provide the information service went to a call centre company in a different location to the seat of government, although in the choice of company it was primarily other criteria such as cost

efficiency, timescale, quality guarantees, references etc, that were involved, and geographical proximity was actually desired.

As the EMERGENCE case study examples illustrate, the types V and VI of relocation are firstly not characterised by comprehensive reorganisation of groups. The relocation rather represents an isolated measure. Secondly, the activities established at a different location complement the previous activities and do not replace them. Obviously, in all of these cases it would have been conceivable for the jobs to arise at the original location. This is why we actually characterise this type as relocation.

With regard to the geographical aspects, two variants can be observed in this type of relocation: in one, geographical relocation is a primary objective, whereas in the other the change of site is not an issue, was not even intended, and to some extent is not even known to the company placing the contract. In the latter, geographical relocation is thus not a conscious decision, but rather arises from the location or geographical division of labour of the contractor, and in particular from the competitive advantages of companies with sites, plants or subcontractors in low-cost regions.

2.7 Isolated relocation as rationalisation (VII)

Some of the types of relocation classified as examples of expansion have already shown that a relocation originally intended as an expansion, can ultimately lead to the reduction of internal capacity and the related loss of jobs at the location so that, after an expansion, the reduction aspect comes to the fore. This can be observed in several case studies concerning IT functions, such as *Invest*, *Betty* or *Secure*. In the type of relocation described in the following, replacing existing jobs by relocated ones is the aim of the decision-makers from the start. The relocation is thus a rationalisation measure to cut staff levels at the original location and so jobs are lost in the place of origin.

Flighty

In the mid '90s, the airline Flighty relocated flight ticket recording from its location in a central EU country to a location in India. Involved in recording hundreds of thousands of tickets a year was a department in the source company employing a total of 90 people. As a result of the relocation, staff levels sank to some 35. The aim of the measure was to cut costs by relocating work. The personnel costs in India were considerably lower than those in the source company's country in Europe. The idea of relocation arose because an airline with which Flighty had an international alliance was carrying out its data processing in India and also had a holding in the Indian company undertaking the work. On the basis of a contract with the partner airline, flight ticket data were entered in India for Flighty too. More jobs were created in the Indian company than were lost in the source company, above all because the lower labour costs allowed Flighty to have more tasks carried out than could previously be afforded in Europe.

Around the year 2000, consideration was given to stopping the manual inputting of ticket data and having it scanned in by machine. The Indian company did not provide this service, and for Eighty the installation of the appropriate equipment in India was out of the question, among other things because a later relocation away from India would not then have been possible for legal reasons. Suitable technology was developed with an electronics company, and a favourable location closer to Eighty's main base was sought. Because of the lower personnel costs owing to automation, locations in the EU country (where the source company is based) were also included in considerations. Finally, ticket recording was relocated from India to a location in a CEE country, where the electronics company operating the scanning already had a branch. However, some accounting work and also some of the data-processing (for example completing the sections of tickets that could only be partly scanned) remained located at the Indian company. The location in the CEE country united the advantages of geographical proximity to the source company Eighty, low personnel costs and the experience of the outsourcing partner.

A second example of the type of cost-oriented geographical relocation as rationalisation likewise shows that relocation does not have to be permanent. As costs are the main motive for relocation and the main attraction of the target region, the establishment is very sensitive to changes in cost ratios, for example as a result of technological advance. If the service is no longer so labour-intensive, it is less of an advantage to have it carried out in regions with low wage costs. In contrast, the migration of call centres from Dublin is based on the fact that the character of the labour market there has changed, making it less attractive. In both cases however, metaphorically speaking, the butterfly decided to fly on.

Childy

The Benelux children's book publishers Childy, an expanding small company, entered the international market in the '90s and had to reduce costs in order to be competitive here. Familiar from book fairs with the products of Asian companies, company management decided in the mid-'90s to relocate pre-press and press work to Singapore and Hong Kong, after these functions had been carried out by Benelux subcontractors since the company's foundation in the early 80s. Despite some organisational problems, the relocation was considered a success. 'How could it go wrong? With such low prices we were hardly taking any risk'. (W7, p 12.) By the end of the '90s, the situation had changed. The costs of pre-press technology had fallen sharply and Childy's turnover was considerably higher. These conditions and appropriate investment made it possible to set up the pre-press stage inside the Benelux plant. There was therefore an insourcing of a function that had never previously been carried out inside the company. At the same time, this meant a return relocation of work from southern Asia to Benelux. Most of the printing contracts were also placed with Benelux printers again in order to make co-ordination and quality control easier.

It is not just international publishing that comes under the isolated relocation type. Even if the wage differentials between the affluent

EU countries and the central and eastern European or Asian economies are particularly marked, regional differences inside one country also represent incentives for cost-oriented relocation.

TNT

This Nordic telephone and Internet company operated a call centre for customer support in a big city. The problem of personnel turnover and the prospect of lower personnel costs was the reason for relocating the centre to the very north of the country in the mid-1990s. Apart from lower costs, the location in a bilingual region also offered other advantages, so that after a cautious start ever more tasks were relocated to the destination location and new functions were given to the plant. Employment in the target location thereby rose to over 100, while employment for these tasks in the original location was phased out completely through turnover and transfers.

As has been shown, this type of relocation, that is the reduction of jobs at one location and the creation of jobs at another, is attributable as a rule to cost considerations. It may also be the case that lack of availability of personnel on the local labour market not only leads to complementary or expansionary relocation, as described above, but also triggers the complete relocation of the whole plant. A relocation involving reduction of jobs can thereby also be labour arket oriented, as the following example shows:

Qualicall

A call centre was set up in a small central European town in an EU structural fund Objective 1 area. Within three years the number of people employed there had risen to 50. A major contract from the telecom sector, which included the overflow from the contractor's internal call centre, could not be managed with the company's limited options for flexible working. On the existing location it was not possible to find sufficient part-time workers prepared to accept widely varying working hours. This caused the company to move the whole call centre to the capital city, where it is easier to recruit the desired staff in sufficient numbers.[1]

As the examples clearly show, this type of relocation corresponds to the picture that public reporting presents of relocation of *eWork* as a whole. Jobs in the region of origin are lost, and in the lower cost target region additional employment arises. Both the savings in the original location and the relocation to a particular region are included in the objectives of the players involved.

[1] This case is exemplary in terms of the rapid nature of changes going on: interviewing in this case study had taken place between February and April of 2001; when one of the EMERGENCE researchers participated at a call centre networking event, she was informed by management of other call centres that the big telecom contract of *Qualicall* had 'broken away', which resulted in staff lay offs.

2.8 Replacement relocation through outsourcing (VIII)

Also in relocation as an isolated rationalisation measure, we find the variant that the outsourcing of work to another company is the main issue and that geographical relocation only arises from it indirectly. We would like to illustrate this type with the example of a Southern European bank.

T-Bank

As with all credit institutions, information technology has become increasingly important in the major Southern European bank, which we here call T-Bank. Through online provision to private customers and business-to-business solutions, the tasks of the bank's IT department increased and with it the related demands. The company management decided to outsource the IT function to a specialist international IT company in order to guarantee the necessary expertise, reduce development costs and increase the speed of development. Previously, the IT department employing a staff of 240 had been based at a branch in a metropolitan city. As a result of the outsourcing they were relocated to another city where the headquarters of the IT company was based. The staff, who continued with their tasks, thus changed their employer and place of work in the course of the outsourcing.

As has already been suggested by the *Invest* example, an originally expansionary relocation can change into a replacement one if a general strategy emerges out of an *ad hoc* outsourcing decision and the internal jobs in the corresponding task area are reduced.

2.9 Summary

This overview of the nature of relocation cases and the causes of the measures has shown that there is actually much greater diversity than one might assume from popular individual examples. As the EMERGENCE case studies have shown, much-quoted examples such as the relocation of software development work to India or the relocation of call centres to regions with low wage costs only correspond with one of several different types of relocation of eWork. Alongside such isolated rationalisation measures through which jobs in the previous location are replaced by those in another region or another country, the objective may also be the expansion of activities or the assumption of new activities at another location. In addition, many relocations do not take place as isolated measures but arise from the reorganisation of a major group. Here, too, expansionary or replacement variants of relocation may occur.

In all of the four basic types that can be distinguished, geographical relocation may already be included in the original objectives or not represent a primary aim at all, and only arise as a consequence of outsourcing to another company. This means that not every measure that leads to the geographical relocation of

eWork has had a change of location as its intention from the beginning. Thus not every company that subsequently relocates work actually chooses the target region. Also playing a role in outsourcing are company-specific competition advantages that only partly correlate with the location of the company. Regional push or pull factors do not therefore directly underly each case of relocation. Indeed, it sometimes occurs that work measured on wage costs or other indicators is relocated from a favourable to an unfavourable region. One consequence of this is that the conclusions for regional policy-making may not just be limited to aspects of location policy, *ie* to the question of attracting new eWork investment, but must also take other factors into account.

As a rule, the various types of relocation correspond to differing motives. Thus, in *geographical concentration*, the cost savings achievable using economies of scale play a dominant role. In *isolated measures*, by contrast, the availability of labour, expertise and cost differences may be the most important motives.

Alongside a systematic overview of the various patterns related to relocation, the EMERGENCE case studies make it possible to analyse more closely the question of what relocation of eWork actually consists of. According to the definition of eWork, an activity using information and communication technology is carried out in a different location to the previous one. As a rule, activities and jobs are relocated and the work is carried out by other people. This is not always the case, however, as staff can be offered the choice of moving with the work. It also happens that the means of production remain at the same location, but the personnel changes its place of work, as was the case at *ITcomp*, where staff moved to a different computing centre and remotely operated equipment that was still at the old location. The location of the equipment on which the technical procedure takes place (that is, the object of work of the IT personnel), is occasionally independent of the place of work.

The concept of geographically mobile eWork implies that means of production, staff, object of work and co-operation partners can be geographically separate from one another. Alongside the description of the preconditions for this, and the related difficulties, which will concern us in the next chapters, the case studies show that the increasing geographical dispersal of work is not a universal trend. Sometimes the effect may, on the contrary, be an increasing concentration of work. For example relocations may arise from the aim of achieving an optimal size of operations in one particular place. Many call centres, for instance, require a size that makes the investment in the technical infrastructure profitable and includes sufficiently large teams in which the transfer of knowledge and flexible use of personnel becomes possible. The location of the means of production and the co-operation partners has thus by no means become irrelevant.

3. The Relocation of Customer Service and Telesales

In the course of the EMERGENCE survey it became clear that the customer service function was the function most frequently outsourced by companies to remote offices. (If *individual* forms of relocation, *ie* to individual freelancers, are included, the figures from the survey suggest software development and support as the business function most frequently carried out remotely.) This distribution was taken into account in the selection of case studies, which aimed to give the widest possible spectrum of types of relocation concerning this function. The relocation of the customer service and telesales functions was therefore the subject of 18 case study investigations. These cases are distributed over several sectors: airlines, telecoms, tourism, financial services, logistics, utilities, the retail trade and the public sector. The respective sector represents an important influencing factor for the background and course of relocation.

All the cross-border case studies dealt with here (with the exception of a transnational relocation from a Southern European country to Morocco) concern relocations within Europe. It is precisely in the customer service function, where communication skills play a crucial role, that very good and wide foreign language skills or the presence of native speakers (and expatriates) in a region are of major importance. This also means that throughout Europe it may be difficult to establish multinational call centres in rural areas. However, even urban call centre magnets such as Dublin can, over the course of time, become areas where personnel become a scarce asset.

It should be said from the start that many companies do not like to use the term 'call centre'. Talk is more often of 'customer care' or 'service centre'. The use of these terms can be interpreted as an attempt to distance themselves from the poor image that is associated with call centres, for example as Taylorised 'sweat shops'. 'Contact centre' is also often used, being another term for a further development of the call centre in the multi-channel direction (telephone services plus e-mail, interactive websites or self-service from cyberspace without live operator support) and away from predominantly telephone communication.

3.1 Why, where and how companies opt for relocation

In the customer service function it is possible to observe a wide spectrum of relocations. Often, relocations can be understood in the context of group restructuring. Thus, in particular there is often an amalgamation of several customer service units at one site. In some case studies there is also a relocation in the course of decentralisation, or an establishment of virtual call centres which are geographically dispersed, but organisationally centralised. Further special features arise from government or administration measures towards eGovernment. It should also be noted that without the intensive use of information and communications technology, the relocations studied here would not have been possible at all.

Seen as a whole, personnel shortages or a high turnover in call centre operators can be identified as a major regional push factor. The personnel shortages and the high demand for operators can arise from the location of too many call centres in one region and from high turnover, which might also be due to workers being burnt out. This turnover leads to high costs in the companies because operating and experiential knowledge, which then constantly has to be replaced, is continually being lost. A several-week training course on its own is not enough: in many sectors operators need several months before they can work independently and efficiently. Apart from the enormous know-how transfer and training expense that a high level of staff turnover implies, the continuity of the operation and the quality of customer service is put at risk, which can again cause high indirect costs if customers are lost. Some companies decide to farm the work out to specialist companies which are available at short notice, are flexible and are cheaper. In the process, risks are also outsourced and ultimately shifted to the employees in these outsourcing service companies.

Minicall

This small, expanding call centre in a central European city sets up appointments with potential business customers for a telecoms company (based in another major city in the country). There are target quotas of a particular number of appointments to be made per week. The job was outsourced because the operators of the internal call centre had not been trained in new technologies and an outsourced solution appeared to be more flexible (due to the specialisation effects of outsourced call centres in general). Outsourcing service companies like Minicall orient themselves towards short-term projects; the telecoms sector as a whole is considered high risk: 'The Internet and telecommunications sector is a precarious sector. It is completely uncertain who will survive. And as a service provider of course you depend on it. If a company like that gets problems, then it's obvious where the first cuts will be made: that's the external service provider. They have, after all, got a works council, and that looks after their own people.' (Z1, p. 14)

Bigger companies and groups sometimes prefer in-house solutions, which, because of economies of scale, are not more expensive than external solutions and bring with them the advantage of greater corporate control. In some sectors, again, the customer service function is a core survival function, which is why outsourcing solutions are out of the question. A decision to outsource does not necessarily have to involve geographical relocation, but takes place with this aim because of personnel shortages in some cities.

Running through almost all of the case studies is the motive of making cost savings, which is to be achieved through the most diverse routes:

- economies of scale in the course of centralisation make it possible to spread fixed costs (for IT support, training, administration, infrastructure, *etc.*)
- operations that go into rural regions utilise the city-rural wage differential, claim public subsidies and expect lower turnover among the operators – on a regional labour market with few other employers – which again lead to lower costs.
- developments such as eGovernment, eHealth and eBanking *etc.* in the long term aim to achieve cost savings by reducing personnel or using resources more efficiently.
- relocating work from departments or plants with direct customer contact to call centres and thus transforming it into *eWork*.

It was noticeable in the case studies that the aspect of corporate control played an important role in most relocations. This is another reason why some companies prefer a relocation inside the company; but it is also noticeable in outsourcing solutions that the source company either maintains very close contact (*eg* at *GovContact*, where someone from the source company visits the call centre daily in order to pass on information and make sure everything is in order) or the ownership structure makes close control possible (as for example with *Call Bank* or *Cella*).

3.1.1 Centralisation versus decentralisation and the virtual call centre

As mentioned in chapter two, internal group concentration processes may lead to relocation decisions, even though regionally no push factors such as high labour or infrastructure costs, labour shortages *etc.* can be found. Economies of scale, synergy effects, harmonised procedures and standardised working methods are the decisive motives for this type of relocation. For some groups, the often very heterogeneous methods of work in national units are a disagreeable and, in some ways also an unpredictable, factor. Centralised units enable more efficient procedures and more corporate control. Also, standardised working methods are particularly advantageous for the customer service function, since

they have the side effect of being an important precondition for the success of potential further relocations. In addition, when there are standardised procedures it is also possible to decentralise where necessary, or where the best preconditions for the establishment of decentralised virtual call centres are in place. A further standardisation and digitisation of all working procedures – all on the basis of the intensive utilisation of ICT – make it possible to oversee every single action of every operator, independent of location.

Call4Dublin, *Parcel* and *Sporty* can be seen as typical examples of Europe-wide or Nordic concentration movements. The centralisation decision in these cases was taken at top management level and did not correspond to the interests of the source units concerned.

Sporty

An international sports equipment manufacturer decided to set up a centralised European Services Centre (ESC) at the location of the existing European headquarters in a Benelux country. The core motive given for the relocation was the creation of synergies at European level. The company expected economies of scale, the opportunity for process improvement, and an increase in corporate control over the regional and national units, through the most extensive possible standardisation of operations. 'This should also result in more corporate visibility and enhance the international image of the company and its products.' (W5&6, p. 2f) The staff and their representatives at the non-centralised national units were not involved in this decision; the relocation was planned in relative secrecy. The public announcement of the decision to relocate took most of those concerned by surprise. As the ESC is near a multicultural metropolis in the Benelux (which is home to a large number of expatriates from many other countries and which attracts natives of other European countries because of its international flair) the company hoped to be able to cover the multilingual requirements of the ESC. A potential risk factor was recognised in the distance from local markets, which could lead to a loss of sensitivity to these markets.

In the case of *Call4Dublin*, the opposing interests of the management – which had ordered the relocation for the concentration of customer services – and the staff concerned at the original locations, created considerable obstacles to the whole relocation: thus the staff in one central European country who had already been given notice of redundancy were to train the new operators in Dublin, the motivation for which may have been somewhat limited. The relocation decision also led to a slump in work motivation at the original location, which led to backlogs of work that the operators in Dublin could not catch up with after the relocation. The doubts that had been expressed in advance that it would not be possible to recruit enough French-speaking operators in Dublin proved accurate, and this led to customer complaints because they were sometimes served by Irish operators speaking poor French.

At *Parcel* too (where back office functions were centralised on a pan-Nordic level) the concerns of the source unit managers became reality: formally, the front and back offices were indeed split, in the national units as well; *de facto*, however, staff in the back office helped out those in the front during peak periods. After the relocation of the back office in the course of a cross-border amalgamation of these functions, the front-office operators were therefore under more stress. At the new Nordic central location on the other hand, back office operators were partly having to be recruited externally. This again meant a considerable loss of company and experiential knowledge, which had a knock-on effect in training requirements and consequently in costs. Apart from this, it was observed in some cases that the staff from three Nordic countries, who have to move to the new location, do not wish to work more than one or two years abroad, and this again leads to a relatively high staff turnover.

A counter-movement to pan-European centralisation inside groups is represented by decentralisation, or the establishment of virtual call centres, to which the following is the main background:

- In the case of *Cosmopol*, a shortage of call centre operators, particularly of German speakers, led to two relocations in the course of which work was relocated from the pan-European service centre in Dublin to two other European countries. The decentralisation relieved the workload on the operators in Dublin, which again contributed to a reduction in staff turnover. The staff required by *Cosmopol* cannot be found easily in general because they are looking for a very special profile: the operators have to have an airline background, otherwise the training would take a very long time. In this case study, the actual locations of the destination companies *Brandfree* and *Aircall* were not as important as the fact that they have an airline background (*Brandfree* is a service provider for airlines; *Aircall* as an airline company has specially trained flight reservation operators) and hence specially trained staff, which would otherwise be difficult to find anywhere in Europe. Some of the operators in the relocated operations are actually 'new' staff; but because their training is being organised by outsourcing companies which have airline experience, it can be done quite quickly.
- At *Call Bank* there is already an internal call centre in a Southern European city. In the course of expansion of the customer care services in connection with eBanking, a second call centre was set up at another site, because the labour market in the north of the country was considered to be too tight and high staff turnover was expected, and because a second call centre in a different location can provide a fall-back in case of technical problems. An attempt to relocate to an island in the south of the country was started, but fell through because of the technical obstacles to setting up infrastructure and database links. The second call centre was

then established at the destination location in the immediate vicinity of the bank's city headquarters, which means optimum (and cost-effective) database links. Moreover, the labour market at this location is considered to be less stretched than that in the city in the north. Finally, this relocation to a company in the engineering sector has brought with it an approximately 30 per cent reduction in operators' wage costs (because the workers are now covered by a different sector-level collective agreement). The two call centres function as a virtual one and call traffic is approximately halved.

- The customer service centres at *Lecky* consist of a combination of walk-in customer care centres providing face-to-face contact, plus six physically separate call centre units and an Internet-based contact centre, which have been integrated and networked into one single virtual call centre. The risk here, too, is that face-to-face contact is increasingly lost, which brings with it a risk of loss of customer loyalty, particularly amongst the elderly. The advantage of such virtual call centres consists in the fact that when necessary (for example, when there are fluctuations in call volume or technical or staffing problems) calls can be rerouted to other locations. At *Lecky* there was a specific problem when another major company opened a major call centre in the same area as one of the six locations, causing recruitment problems through increased competition for call centre staff.

These examples show that next to centralisation developments, there also are decentralising tendencies, which are mainly due to regional push factors like labour market shortage; besides, the establishment of virtual structures creates independence of location and limitation of risks, which is not possible with a single centralised location.

3.1.2 'Customers' delight' ... from teleservices to self-service

Companies frequently mention increasing customer satisfaction or the improvement of customer service as a motive for relocation or outsourcing. This is considered particularly important in view of rising competition and growing customer mobility. Above all, the use of the Internet to compare suppliers, terms and prices, though also as a potential shopping centre, has accelerated this dynamic. Above and beyond this, privatisation and liberalisation, for example in the telecoms and energy sectors, have brought with them large-scale campaigns to attract customers, with professional customer care centres acquiring major importance in the process.

One call centre manager of an international group believes, for example, that in customer service the philosophy has moved on from 'pleasing the customer' to 'delighting our customers'. The establishment of customer care centres exclusively concerned with

customer relations is intended to enable customers to reach a responsible and competent person more quickly. If one rings a call centre, minutes of exposure to music in a waiting list or repeatedly being connected to the wrong person (with the caller having to explain the subject of their call to someone who is not responsible for it in order to be passed on) are supposed to belong to the past. The call centre technology and, in the ideal case, customer relationship management software, makes it possible for operators to have the appropriate template with all the customer-relevant data (including documentation on previous interactions) in front of them with one mouse click or even automatically, and to deal with the customer enquiry immediately in an informed and competent way. Some relocations, however, can (either initially or in the longer term) lead to reduced customer satisfaction, as in the cases of *Call4Dublin* and *Parcel*.

For customer care, the expansion of call centres may also mean, among other things, a changeover from personal relations to telephone advice; this development involves social exclusion risks for some population groups, in particular older people or migrants, because these people often lack the interests, skills or access to the technology to go into cyberspace and do their banking business there, or to deal with an anonymous voice without face-to-face contact.

Lecky

In this case, privatisation, restructuring and company mergers have led to rapid developments affecting two different energy concerns. Key business functions were restructured and integrated. Customer services (originally handled by staff at about 200 retail outlets selling appliances and 'white goods') were separated from retail functions, integrated between merged companies and relocated in ten walk-in district customer service centres. Call centres were set up at six of these sites, handling telephone inquiries and emergencies. The call centres were then networked together through the parent company into one single virtual call centre serving both companies, with calls routed automatically according to availability. A new pilot Internet-based contact centre was established to promote online services together with Internet shopping, but shortly after the case study was completed the retail division was sold off. The next stage was to integrate the remaining online services within the call centres, and to encourage customers to use the websites and manage their own accounts online. The group aims to improve productivity, control costs, consolidate and expand the customer base, and respond to changing customer demand in an increasingly competitive energy market.

In most of the case studies – apart from the claim that the improvement of customer service is indispensable in the face of sharp competition – the impression emerges that the phenomenon of call centres with many live operating agents (and thus their jobs) may possibly be a temporary one. Pilot projects are being eagerly and rapidly developed technologically to provide customers with self-service in banking, healthcare consulting,

management of electricity and telephone accounts *etc.* Individual companies, such *Sporty* in our case, are ambivalent with regard to customer self-service over the Internet, because customers (for *Sporty* these are sports equipment retailers) can then get a much more precise price-performance comparison. This empowerment potential for the consumers is thus also seen as a risk factor for some companies. Whether (and which) customers will see the opportunities for self-administration and shopping by Internet as delightful in the sense that 'sofa banking increases the quality of life' or as an unpleasant outsourcing to themselves, will become apparent in due course.

3.1.3 The independent self-managing citizen

Interesting developments can also be followed in the public sector, where active efforts are being made to improve the citizen-friendliness of public institutions and give people easier access to information.

GovContact

A Benelux regional government decided to outsource and relocate its citizens' advice service to an experienced call centre company, here called [contact]. The aim is the improvement and standardisation of information, and the claim that every citizen has the same right to the same information. Outsourcing takes place among other things because of the desire to distance the service from the bureaucratic image of public institutions, and because outsourcing to a professional call centre operator is cheaper. Furthermore, because of the public-service recruiting procedures, it would take too long to employ people on a short-term flexible basis: 'If the amount of daily calls increases by 300, I need three more people. [contact] can offer these people from one day to another. In [govcontact] hiring three civil servants takes about a year.' (W3, p. 15)

Hub

At the centre of this case study is a national strategy to establish a cohesive and comprehensive health information infrastructure which allows patients and health professionals rapid and non-bureaucratic access to health information and advice. The information brochure of this service says that the aim is 'to provide quicker, easier and faster access to advice and information for people about health, illness and the [health services] so that they are better able to care for themselves and their families.' Callers are referred for further help if necessary to doctors, emergency services, self-help groups, pharmacists, specialists etc.; local centres also provide out-of-hours call-handling and paging services for doctors who are general practitioners. The service is also an access point in medical emergencies.

The background to this eHealth strategy is an overstretched and understaffed public health service. About 1,000 experienced nurse advisers at 22 local call centres can be contacted confidentially by members of the public through a single telephone number about any health concerns they have. The service aims, among other things, 'to

make better use of the time and skills of health-care professionals and resources' and 'guide callers safely to the appropriate level of care' (V4, p. 6). This means, on the one hand, empowerment for the nursing professionals involved and, on the other hand, transfer of some repetitive work, with doctors and emergency services relieved of some more routine queries or inappropriate self-referrals.

HMA is one of 22 local call centres and is staffed both by call takers (first point of contact and providers of straightforward health information) and by nurse advisers (who assess patient care needs and provide clinical advice, and/or direct callers on to other care providers as appropriate). The first formal evaluation found that 'the service is redirecting a significant number of callers to a different level of care from that which [the caller] had planned' (V4, p. 9). Online clinical practice and service standards are supported by a specially developed computer programme structured to guide the nurse adviser through the clinical process. Standards are monitored on site by senior nurse managers and clinical directors, and nationally for consistency, by panels of expert medical and nursing practitioners. Independent evaluations are carried out by medical and academic institutions. In 2002 all 22 call centres are to be networked into one virtual one.

Ultimately, electronic networking of comprehensive health information including patient records with these nurse-led helplines is planned, but medical records will only be accessed with patient consent. Research shows high levels of patient satisfaction, but others (including some doctors) have been critical, questioning the safety and professionalism of this type of remote treatment.

Individual Insurance Agency (IIA)

As the result of a political decision, citizens of a Nordic country are in future to manage a small percentage of their pension fund themselves. An agency has been founded as an independent section of the department of finance, to operate as an information bureau for citizens and a brokering agency to fund managers. A total of three customer service centres are being set up: one in the centre and two in the rural north of the country. The rural destination locations were chosen in order to create new jobs in a regional context of high unemployment and to avoid trained operators being poached by competitors at the source location. Since most users have now taken their investment decisions and because of the slack situation on the stock exchange, most of the population have not brokered their funds and the number of calls has fallen drastically. This has led to the shrinkage and merging of the customer service centres — only one location in a small town still remains.

The *IIA* case study in particular throws up the question, beyond the issue of relocation, of whether such an information service in the midst of a trend to the privatisation of pension provision is not also a start-up initiative to train the population in matters of investment funds and stock-market business. If one assumes that the eGovernment concepts are conceived of as being for the responsible citizen who is autonomously and independently involved in matters of his or her rights and interests (*eg* health and pension management), this means an enormous socialisation

process for the whole population and a socio-political transformation visible in the case studies of *GovContact*, *Hub* and *IIA*.

3.1.4 Cities as magnets for multi-lingual customer service centres

It is often assumed with regard to the relocation of call centres that these activities can be carried out at any place where the necessary telecommunications and technical infrastructure is available. In the case studies dealt with here, the infrastructure was an obstacle only in a very few cases, such as the case which led to moving away from a Southern European island, or in the case of a Nordic region where considerable investment and adaptation had to be made by the relocating company. This indicates that there are regions on the European periphery where relocation involves high investment and data-line costs: for permanent lines in the course of database links to the source company, long distances still lead to cost disadvantages. Whether in such cases there is nevertheless a relocation, is dependent on the regional labour market situation, the subsidy options or political decisions.

In our studies of the relocation of the customer service functions, the labour market situation emerges as the most important push or pull factor.

On the one hand, there is a noticeable tendency to move to rural regions in the hope of lower personnel turnover because there are fewer competitors to poach operators. Lower wage levels in the rural area as well as public subsidies also reduce costs (*eg TNT*, *IIA*, *Eurocall*).

On the other hand, however, there is also a tendency to move to the major cities where there are indeed more call centre companies and thus more defectors, but also a larger pool of potential personnel:

- In the *Qualicall* case study, this was the decisive factor for moving from a small town to the capital city. The management stated that recruitment bottlenecks with regard to flexible labour were 'war-decisive' for the relocation decision to move the whole call centre. 'Flexible' was defined as being prepared to work part-time and in shifts, distributing working hours flexibly across week-days, weekends and within 24 hours of one day.
- In the case study *Sporty*, a location near a metropolitan city in the Benelux was deemed ideal for the establishment of the pan-European customer service centre.
- Management at the call centre *Eurocall* sees cities like London, which have more opportunities with regard to pan-European activities, as competitors. 'London is a metropolis with a lot of foreigners. A company based in London has access to a lot of

people who speak other languages at a native-speaker level, so our worst competitors are based there. On the other hand, however, our strength is our skilled employees who receive a lot of training. It is quite difficult to build up the training facilities that we offer to our employees.' (X3, p. 15; manager of *Eurocall*)

Whether the big city or a rural region is preferred is also dependent on the nature of the call centre or its service. Anyone who wants to set up a transnational call centre is more likely to settle for a metropolis, because only there can a wide range of languages be covered, or people from other countries be persuaded to move their place of residence if the destination seems attractive. In the *Parcel* case study it has been a challenge to get operators from all the Nordic countries to move into a rural region. In transregional relocations inside one country this problem does not occur, if operators with the same mother tongue can be recruited on site. In the case of *GovContact*, excellent private and public transport connections, which precisely during recruitment bottlenecks make a flexible extension of the recruitment area possible, also favoured the destination location.

In the framework of the EMERGENCE case studies, it became clear that the availability of operators is sometimes overestimated, or in some regions after a call centre boom with many operations being set up, there is competition for agents, which very quickly drives up staff turnover and costs. A Nordic call centre location with numerous operators avoided this battle by a 'gentleman's agreement' under which companies agreed not to go in for mutual poaching of personnel; also in Dublin there are agreements among members of the employers' association not to poach staff.

As mentioned above, some relocations are based on strategies of geographical concentration. Regional push factors are of no relevance here. However, the regional labour market context may also play a key role in this type of relocation if it is difficult to recruit sufficient operators from the whole of Europe (or a regional grouping such as Scandinavia) for the new, centralised destination. In this context it is interesting to take a closer look at Dublin as a call centre magnet, where in recent years there has been an increasing shortage of operators.

Dublin, the call centre 'pressure cooker'

For many reasons, Dublin has become an attractive meadow for butterflies of all kinds. These include tax advantages, the local labour market situation, one of the longest working weeks in the EU (38.9h[1]), the fewest negotiated annual leave days and the

[1] This includes overtime and compares to an EU15+Norway figure of 37.7 hours (European Foundation survey, 'Employment and Working Time in Europe', 1998).

longest average annual working hours (1,802h/pa), as well as cheap inbound international toll-free services[1] *etc.* Another attraction is the fact that, according to European Commission figures, for every Euro in wages, Irish employers contribute 18 cents in taxes and social welfare. This compares to 46.1 cents in Germany and 39.2 cents in France.[2]

'In April 1999, the *Tanaiste* (Deputy Prime Minister) reported that there were approximately 50 multilingual European call centres operating in Ireland employing around 6,000 people, representing about 35 per cent of the total European market. In total, around 11,000 people were working in call centres in Ireland in 1999 (including the domestic market). Around 36 per cent of those in multilingual call centres were foreign nationals – a figure expected to rise to around 40 per cent.' (U1, p. 4)

For some time Dublin has been confronting numerous problems – in particular in connection with personnel recruitment and turnover[3] – which might induce some companies eventually to undertake a further relocation. 'It's hard and expensive [for staff] to find accommodation, and after six months or a year of Dublin's pressure cooker atmosphere, many foreign nationals are ready to move on after an enjoyable working holiday. [...] Unless the skill shortage can be tackled, particularly in relation to basic language skills in the indigenous Irish working population, the cluster model itself can cause demand to outstrip supply, leading to relocation.' (U1, p. 14)

According to an expert from the Irish Department of Education and Science, there has long been a range of strategies and initiatives to combat the problem of personnel shortages. There is a range of qualification measures (*eg* a post-leaving certificate courses in teleservices) designed to improve the foreign language skills of the Irish workforce for multilingual call centres; since 1997 there has also been substantial investment in language-laboratory equipment and teaching availability. However, these measures enjoy no great popularity, because call centre work has a poor image (with regard to payment and qualification requirements). The representative from the Department of Education and Science stressed that the improvement of wages and conditions (*eg* for women returners, crèche provision, as well

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1 Figures taken from IDA (Industrial Development Authority) sales material from 1998 aimed at persuading multinational companies to locate operations in Ireland.

2 Sunday Tribune, 'EC figures explain Irish attraction to continental neighbours', 16 September 2001.

3 'According to a survey conducted by Performance Marketing, reported in the *Irish Examiner* on 12/5/00, in seven out of ten Irish call centres, staff turnover averages 30 per cent, while employment in Irish-operated, pan-European call centres is set to grow from 7,000 to 12,000 by 2003.' (U1, p. 4)

as offering courses in less intimidating surroundings such as community centres rather than in conventional colleges) would be an important incentive. 'An evening course in call centre skills arranged for women returners got a strong attendance of 100, but when the employer companies came to present their job opportunities to the women, the low wage rates on offer got a response of laughter' (U1, p. 9).

'The problem of skill shortage of call centre workers in the Dublin area has been clear for at least two years, and at the moment there are particular shortages of workers with German, Flemish and Dutch language skills. The government has responded by 'capping' subsidies for companies that wish to locate in the Dublin area.' (U1, p. 8) The reason that the government stopped providing subsidies for call centres in Dublin was because the employers' association requested that they cease the funding in order to ease the problem of skill shortages in the region, and to encourage location outside the Dublin area – *ie* to let off steam from the pressure cooker. So the government was responding to the employer request. However, the call centre employers in Dublin are unhappy because they feel they have not only lost the subsidy, but also other government supports that they need, for example in relation to training. These developments show that the actors involved (employers, the Industrial Development Authority and the Department of Education and Science) are taking measures to tackle the skill shortage, but that finding a good balance is challenging.

Cosmopol

In the European flight reservation centre of the Cosmopol airline in Dublin, the quality of customer service was endangered by the high level of staff turnover plus recruitment difficulties (in particular with foreign-language operators) as well as by increasing customer calls. This led to a decentralisation. The first project (English-language, flight reservation changes — 20 jobs) relocated to the airline service company Brandfree. In a further project within an international airline alliance, the German-language reservations were relocated to the customer service centre of another airline in central Europe (nine jobs). Cosmopol is satisfied with the relocation because it has led to an improvement in the quality of service within the Dublin customer-care centre and relieved the burden on its agents in Dublin (and thus also contributed to lower staff turnover). There remain some staff shortages of Flemish operators, which can still be overcome, however, because the call volume for this language has not experienced a jump in growth; decentralisation would however, if necessary, also be possible in this case.

The *Cosmopol* case study clearly shows that precisely because of the intensive utilisation of ICT, a partial relocation and decentralisation can function well and does not lead to dramatic disturbances (and job losses in the source company) that would be involved in the relocation of an entire operation.

At *Call4Dublin* at the time of the case study (spring 2001), in the course of a change of ownership, a cost-benefit analysis was being carried out inside the company to find out, in view of the major problems of finding French-speaking agents in Dublin, if and in what form a continuation of the customer-care centre's French-speaking activities was worthwhile and possible.

3.2 ICT, the great enabling backbone, and organisational challenges

Technological opportunities in the utilisation of information and communications technology were in many cases the great enabling factor in the relocation of customer service. Apart from call centre technologies (such as CTI, ACD, CCD *etc.*[1]) and CRM[2] software, linked customer databases are of major importance. The development of these databases and the most extensive standardisation and digitisation of information were and are crucial to the functioning of relocation.

The technological and organisational solutions in the individual case studies are to some extent very complex and specific. However, we summarise some interesting cases here for illustrative purposes.

Sporty

In this case of the concentration of the customer service function at the European headquarters (EHQ), centralising relocation was made easier firstly as a result of previous experience with concentration and telecooperation (the sales and finance units had already been concentrated) and secondly as a result of a high degree of digitisation and accessibility of information. At the new location ACD, CTI, IVR[3] and a database management system are used to hold all orders and client information. Organisationally and technologically, departments such as sales, customer service, the distribution centre (which is not at the EHQ but in another central European country) and finance must be networked so that all processes, from taking orders through to invoicing, function smoothly. The integration of all technological functions, which has become increasingly complex over the years, is regarded as problematic. At the moment the transfer to an integrated ERP[4] system is being prepared. In 2002 SAP is to be implemented. As

1 CTI = Computer Telephony Integration, ACD = Automatic Call Distribution, CCD = Computer Call Distribution.

2 CRM (Customer Relationship Management) supports all business processes in which the customers and external business partners are involved. On the basis of a better understanding of customers and their needs, companies hope to be able to improve customer satisfaction and raise turnover.

3 Interactive Voice Response

4 Enterprise Resource Planning

a result of the relocation, the task packages at the new location have become narrower or involve a more complex division of labour. On average, the time spent dealing with a call is between two and two and a half minutes. More complicated questions such as query management on logistical problems are routed to dedicated operators. At Sporty it is said that apart from organisational and technological adaptations and changes, the concentration under one roof of customer service operators from 20 countries represents a challenge with regard to soft issues. This is tackled in several ways, including 'cultural training' in order to achieve more mutual understanding and tolerance. 'Of relevance for the Benelux unit was the organisation of a session on cultural differences between Belgians and the Dutch. To give some examples, the Dutch really hate it when a boss is watching over their shoulders, because this gives them a feeling of distrust. Belgian customer service representatives, on the other hand, have fewer problems with the practice, because they tend to be less self-confident and therefore have a greater need for reassurance.' (W5&6, p. 7) Initially, some of the relocation-conditioned changes gave rise to annoyance both among the operators (who had to get used to new working methods) and among the customers (who were presented with a new routing system). One interviewee at Sporty assumes that 'every organisation initially faces the inevitable teething problems. It takes a long time to really get the hang of things.' (W5&6, p. 20)

Tourgoff-Eurocall

Here the development of an electronic information system was needed in order to make the relocation (concentration) of ten national offices possible. This took approximately two years. The system consists of a tourist product database — fed with information from the headquarters, the national offices and hundreds of organisations — and a customer information system in which all customer information, types of query [illegible] are stored. The customer information system data is also used for marketing campaigns and (on the basis of a customer's previous enquiries and data) the system is able to make automatic recommendations for mailing information. The mailings are carried out by a mailing house in another European country, which receives all relevant data for the mail electronically from the customer service centre every day. Tourorg (Tourgoff's parent company) regulates access to the electronic information system and can also oversee work in the Eurocall call centre. There is a continual flow of communication between Eurocall and the national offices in the various countries in order to keep the operators informed about activities, special offers, changes [illegible] The operators receive regular training from representatives from the national offices. There is great readiness to co-operate on the part of the national offices, because the relocation of the customer service function has for them meant a relief from customer queries, and has made it possible for them to specialise in marketing.

Call4Dublin

In this case, the customer service departments (front and back office), as well as the front end of the credit and collection department, were relocated from a big city in a central European country to Dublin. Before the relocation, the work processes were somewhat client-oriented; afterwards they were more operations-oriented with a higher

degree of standardisation and division of labour. This relocation led to 72 redundancies at the source location.

After the relocation decision was made public, there was a drastic reduction of productivity in the source company. As a result, a backlog of work built up for the new operators in Dublin (in particular in credit and collection), which, for new recruits in particular, was impossible to catch up with. In addition, the transfer of know-how was carried out inadequately, because on the one hand the trainers who had already been given notice of redundancy were sent to Dublin, and understandably were not particularly committed to this final task, and on the other hand the high staff turnover led to continual loss of what was in any case fragmentary technical expertise in Dublin. The co-operation between Dublin and the source location is marked by tension, because the lack of sufficient technical skills on site means that the source company frequently has to be rung up, which is regarded there as an unacceptable disturbance and is seen by one of those concerned as follows: 'Although it's not their fault, the people in Dublin have taken away the jobs from our former colleagues and friends.' (W1, p. 13) Finally, the circumstance that, because of the shortage of scanning and digitalised correspondence, a lot of paper has to be sent backwards and forwards, has led to the paradoxical situation that sometimes the solution to a problem is to be found at the other end. 'It is very difficult to tackle a problem when one part of the solution is to be found in [the source location] and the other part in Dublin. [Call4Dublin] has become a really schizophrenic organisation.' (W1, p. 17)

Finally, after six months, the front end of the credit and collection department was relocated back, because the sending of overdue debt reminders in Dublin took place in such a way that, because of the above-mentioned problems, it caused the company serious loss of income.

Cosmopol-Brandfree-Aircall

Because of the significant increase in volume of business and the precarious personnel situation in Dublin[1] the airline Cosmopol took a first step towards the relocation of (English-language) flight reservation changes from the pan-European service centre to another English-speaking country. The destination company Brandfree works as an outsourcing service provider for various airlines and apart from flight reservations offers a range of services. In the meantime, 20 jobs have been created at the new location. Brandfree was chosen because normal call centres had too little airline industry experience to do the job properly, and because there was already previous experience of co-operation. There were initial problems with regard to this relocation: from Brandfree's point of view, both the complexity of the Cosmopol product and the amount of training needed were underestimated (one week training at Cosmopol and three weeks coaching by Cosmopol staff at Brandfree were too little): 'Brandfree prides itself on having a high proportion of staff with extensive airline experience and uses this as a selling point with clients, promising that they can get operations up and running quickly because of their

[1] 'Action was required to break a vicious circle where agents were overworked, leading to high turnover levels, high training burdens and further workload issues.' (U1, p. 5)

experience and contacts. Information from both source and destination indicate that in this case the agents did not have the skills and knowledge necessary to do the job, and that more training was needed than initially envisaged.' (V6, p. 10) Initially, the helpdesk in Dublin had to be used intensively by the Brandfree operators because of a lack of sufficient on-site technical expertise. After initial teething problems, the relation between source and destination now functions well and there are also regular personal meetings, which are important for knowledge transfer and long-distance relations.

Cosmopol's experience with Brandfree also flowed into the second decentralising relocation to a German-speaking country, which ran almost without a hitch. As the new facility went online, the Dublin staff sent emails welcoming the new agents on board. The eight operators (plus supervisor) at the destination location work as a dedicated team, exclusively for Cosmopol. This separation from the Aircall operators, conditioned by the incompatibility of the electronic reservation systems used by the two airlines, has the advantage for the dedicated operators that they can specialise in one product, although there is the disadvantage that sickness and holiday times in such a small team can cause bottlenecks. German-language calls at Cosmopol in Dublin are routed to Aircall. The two centres' opening hours diverge, however, so Dublin continues to take all calls between 8 am and 6 pm (central European time); in Dublin, the reservations centre is open from 8 am to 11 pm Dublin time. This division of labour means that work on customer requests has to be at a standardised level, which again implies special and high requirements for co-operation and information transfer. Everything discussed with a customer must be documented in the booking ('attention next agent') so that an operator in Dublin who is confronted with a call from the same customer in the evening knows what has happened. This is, however, also usual within the Dublin call centre. The delocalised operators' calls to the Dublin helpdesk are becoming progressively fewer, because on-site knowledge of particular Cosmopol procedures is growing. Within the Aircall call centre, there is an information synergy effect because the operators from the dedicated Cosmopol team and the Aircall operators can help each other out with questions over their respective related products.

On the basis of the case studies analysed, the following points can be summarised with regard to technology and organisation:

Technological components furthering relocation are

a) a high degree of digitisation of information and thus electronic access to it. In the *Call4Dublin* case study, the lack of digitisation turned out to be a crucial hindrance. As a result of the fact that correspondence with customers was partly conducted by post, there was the problem that important information and files were missing either at the source or destination location.

b) access to information systems in which all operations and customer calls can be documented (CRM software), through which details of all past interactions and relevant data are swiftly and effectively available for every customer contact (regardless of which operator or which site is dealing with them)

c) knowledge bases. If these function well, the operators can call up electronically a lot of information needed for customer contact. In the case of *IIA*, for example, legal experts at headquarters have developed a knowledge base according to an FAQ (frequently asked questions) system, intended to support the operators on difficult questions. At *Aircall*, a project is running at the call centre to set up a knowledge base to allow flight reservation operators to access useful and standardised information which at the moment all operators have to manage individually in numerous files.

Being equipped with modern call centre technology, which enables a smooth workflow (*eg* via routing calls to available operators or other locations when overflow occurs), and well-functioning cost-efficient databank links, can be considered basic equipment in the light of our case studies.

Impact on division of labour

Relocation processes can have significant effects on the division of labour for the workers who remain at the source location. Work may either become more interesting and less stressful (as in the cases of *Tourgoff* and *Cosmopol*) or it may intensify. The latter happened at *Parcel* where – according to local management at one national office – the front office operators at the source location were faced with major stress at peak times, because their back-office colleagues were now located remotely at the new pan-Nordic location in a single Nordic country and could no longer help them out by taking the overflow calls. What seems technologically and organisationally feasible in the planning phase can in reality lead to numerous obstacles and considerable problems if informal and social structures and soft issues (such as the perspectives of those concerned) are not sufficiently taken into account.

Telecooperation

Matters concerning telecooperation are of varying significance in the individual case studies, depending on the division of labour agreed between source and destination companies. Relocations are generally successful if there is a climate of co-operation and trust between the employees at the source and destination locations, and if there is a continuous transfer of knowledge and information. At *GovContact* this is regarded as very important and a monthly meeting between the back office of the Federal Government and the operators is dedicated to it; a manager from the source company travels almost daily to the destination company *Contact*. In most cases, a co-operative atmosphere is then created if those concerned at the source location have been actively involved in the decision-making and relocation process and if the relocation did not lead to a threat to jobs and a qualitative cutback in the content of work. In the *Tourgoff*,

GovContact and *TNT* cases, the relocation meant that staff at the source company could give their attention to more interesting activities. In other cases, such as *Call Bank*, there are conflicts at middle-management level between the source and destination companies with regard to the division of labour and areas of responsibility. The destination company wants more responsibility in relation to acquiring IT functions; at the source location it is feared that this would mean a fall in the content of work.

Long-distance relations are in some cases supported by heavy use of video- or teleconferencing. In most cases, companies are convinced of the necessity for regular personal meetings in order to ensure sufficient information transfer and create an atmosphere of trust. For this it is important that staff at the source and destination locations also know each other personally, and link the voice on the phone or the emailer with a real person. At *Brandfree* the long-distance relations improved when the team manager regularly travelled to Dublin – 'Once they saw that I didn't have two heads things instantly improved.' (V6, p. 10)

3.3 Call centre operators — not so available or replaceable after all?

3.3.1 Characteristics of the workforce

With regard to the characteristics of the staff responsible for customer service before and after relocation, there is often a *shift* towards younger and less-qualified operators (in particular with regard to language skills). The reduction of the qualification level is made possible by the forced standardisation of working process and content in the course of the relocation, as well as the narrowing of task packages. There is often very little change in the gender distribution, because customer service was already a somewhat female area of work even before relocation. According to the type of service, the ratio of women fluctuates between 50 per cent for the operators providing Internet support at *TNT*[1] and 90 per cent for the nurse advisers at *Hub*.

The age structure of the relocated jobs at the source location is quite varied and not necessarily dominated by people under 30. In some companies, before the relocation, employees of all age groups who had been in the company for many years were entrusted with the customer service function (although before the relocation this area was occasionally integrated with other fields of work).

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[1] In this company, on the other hand, the technical support department is staffed mainly by men, in the customer service department there are more women: on average there is a 50:50 ratio.

In the case of *Call4Dublin* the relocation resulted in 14 early retirements (of a total of 72 lost jobs). The relocations often entail a 'rejuvenation' of the staff and in some call centres the majority of the employees at the destination company are under 30. This younger workforce arises from a varying sets of circumstances. In the *Cella* case study, at the destination locations (in a Southern European country and northern Morocco) there are numerous young unemployed (often university graduates) who gain entry to working life through work as operators. If native speakers are recruited for multinational call centres, then these are often young people who are interested in a stay abroad for some time (one to two years). At *Call4Dublin* and *Parcel*, the centralisation led to a younger workforce at the destination location. In some cases, such as *Lecky* or *Hub*, the age structure of the staff is mixed, which among other things may be conditioned by women returners, for whom a job as an operator likewise makes re-entry to working life possible. The companies regard having a mixture of age groups in the staff as desirable. At *TNT* it is assumed that 'operations are not optimised if only younger members of staff are employed.' (M2, p. 14) *Cosmopol*, where the reservation agents are generally under 30, is making great efforts by a variety of initiatives to recruit women returners with language skills. The age structure is also dependent on the type of service: in the *GovContact* case study, predominantly younger people do indeed work in the external *Contact* call centre, but the operators responsible for *GovContact* are somewhat older – 'This could be related to the intended profile: the people in question have to be somehow interested in the Federal Government, in legislation, politics *etc.*, and apparently this is more often the case for people at a riper age.' (W3, p. 14)

The formal qualification requirements for operators at the destination locations are not very high. Being quick on the uptake, an ability to cope under pressure and the possession of soft skills are all highly rated. Foreign language skills are likewise very important. However, there are exceptions to this, because the qualification requirements very much depend on the services offered and, in the case of *Hub* for example, highly qualified nurse advisors are working in the customer service centres. Alongside other factors such as wage levels, part-time work *etc.*, the qualification profile is a fundamental reason why women seem predestined for operator work, because it is precisely to women that the required skills are ascribed *qua* gender. 'The attempt is being made to push male applicants and get a better mix. I would say that this perhaps also comes from the wage structure – it's not exactly a highly paid job here. But it is definitely a very strenuous and demanding job. And that is quite simply a stress that historically women cope with better. And because of the pressure of work and the financial aspect, it is more tolerable to a second-income earner. It is relatively hard to be a single-income earner as an operator in a call centre.' (Y2, p. 10)

Compared with the situation before relocation, experiential, company and sectoral knowledge of the new workforce is essentially more limited. Also, in some cases, tri- or bilingual operators (*eg Call4Dublin*) were working at the source location before relocation and this language-skills resource is not present at the new location. Precisely because of the need for this transfer of experiential and company knowledge, the simultaneous relocation of staff from the source company is a considerable facilitator, Many staff, however, are not interested in relocating their residence, working and living area to another region or country. The readiness to go to a new location is again dependent on many factors such as stage of life (age), career opportunities in the regional source market, or loyalty and identification with the company.

In the case of **Sporty** there was a fusion in one central European country of all European customer service centres: 43 of 250 operators from all over Europe decided to make the move (eg eight of the 31 Italians and 15 of the 27 Spanish). Interestingly, none of the 25 customer service operators from a neighbouring Benelux country was ready to relocate to the new location, although for these employees the physical distance would have been the shortest. This difference can be ascribed to the following background:

- Southern European native speakers are more in demand in the centralised customer service centre and also more difficult to recruit.
- At the time of the relocation, the regional labour market was very favourable for job-seekers at the source location in one Benelux country; the redundant call centre operators probably found other jobs very quickly. In Italy and Spain, on the other hand, the less rosy labour market situation possibly represented more of a push factor for a transfer.
- There is hardly any wage difference between the two Benelux countries in question; for southern European operators, however, a transfer to the Benelux country means essentially higher pay; furthermore, for people with a greater cultural and physical distance to the Benelux, the prospect of living near a metropolitan city is probably more interesting than for the neighbours from the other Benelux country.
- Cultural issues and frictions between the citizens of the two Benelux countries may also have played a role in the limited readiness to move to the neighbouring country.

3.3.2 Consequences for employees at source and destination locations

Situation and perspectives at source locations

As has been mentioned, in some cases (in which there was no outsourcing), staff at the source company were made the offer of a transfer to the destination location. This moving with the relocation had the advantage for the company that these expatriates fulfil a

central role in passing on know-how and experiential knowledge at the new location. The moving of a large number of staff from the source to the destination location guarantees continuity of customer service and is regarded as a success factor or facilitator in relocation. However, in the case studies analysed, most staff were not interested in such a transfer or were only prepared to relocate for a short time. On top of this, internal transfer to other departments inside the company was easier where staff had previously not just been call centre operators with a narrow and standardised range of tasks. If the customer service function before the relocation was a highly specialised and independent field of activity, then the customer service operators could not be transferred so easily. In some cases during the course of the relocation there were redundancies at the source (*Qualicall, Call4Dublin, Sporty* and *Parcel*). At *Sporty*, for the 25 jobs that were endangered in one European country, there were few possibilities of a transfer inside the national location, although there are 1,200 jobs there (mainly in storekeeping). Working in the stores was not an attractive proposition for most of those concerned in customer services. In the case of *TNT*, after the relocation decision the personnel at the source location, which in any case had a high staff turnover, was progressively replaced by agency workers – when this exchange was complete the relocation was carried out.

In relation to workload and stress, expansionary relocations may have the effect of reducing these factors at the source locations: for the remaining *Cosmopol* operators in Dublin, where it was not possible to recruit sufficient personnel, the two partial relocations to two European countries represented a relief which led to a reduction in staff turnover. However, in this case attrition also slowed down because of a fall-off in demand due to the slow-down in the US economy. This illustrates the cyclical nature of the airline industry, which constantly has to deal with increases and decreases in demand.[1] At *Tourgoff*, too, the relocation led to greater work satisfaction at the source locations. At *Parcel* the relocation had the opposite effect at the source location: there the workload in peak times is reported to be greater now, because the back-office colleagues are no longer there to help out.

For source location staff, the relocation can mean that their job becomes more demanding and they can dedicate themselves to more highly qualified activities. At *GovContact*, for example, the civil servants are now working on standardising and improving the quality of citizens' information, and writing scripts for the call centre operators. At *Tourgoff*, staff in the national offices can now specialise in marketing, because they are no longer disturbed by customer queries.

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[1] The latter argument applies to an enormous and unforeseeable extent especially in the light of the events of the 11 September 2001.

Situation and perspectives at destination locations

In the call centres at the destination location there are opportunities for staff to be promoted to team leader and supervisor. The operators interviewed in the case studies admit that, because of the routine-based monotonous processes, work at operator level in the customer service centre is not a career they wish to follow for more than a few years. Some see the operator job as the first step on an internal call centre career ladder. For many the job as call centre operator is a (re-)entry job after parental leave, study, unemployment *etc.*, which has little to offer in the long term. At *Hub* there was the very positive effect that some ten per cent of the 1,000 new nurse adviser positions were occupied by workers who had already left the health-care profession because of occupationally-caused musculo-skeletal disorders (disabilities such as back injuries caused by lifting and direct patient care). These were able to return to the profession for which they had trained.

On the question of women and career opportunities, in the course of the relocation of customer services it was established that the female predominance at operator level in the call centres at the destination location is in many cases also reflected at management level.

With regard to promotion opportunities and career development, it can be said that a possible change from destination to source location is recognised as a career opportunity by operators in some companies. At *TNT*, 20 staff (out of a total of 110) previously employed in the northern destination location were able to transfer to head office; there have so far not been any moves in the other direction. Fundamentally, it is the case that such promotion or transfer is easier in relocations without outsourcing. Call centre operators in external call centres such as *Eurocall*, *Qualicall* or *Minicall* can have hardly any expectation of being taken on by the contracting company: they usually have too little company and sectoral knowledge of the contractor and, because of the very highly standardised and routine work processes and the geographical distance, they can only acquire this knowledge slowly and with difficulty. At *Call Bank*, some operators at the destination location are hoping for promotion to the source company in the north of the country, which operates an internal call centre there whose personnel are paid according to a banking sector collective agreement (30 per cent higher pay than at the destination company in the engineering sector). However, the chances of such a transfer, according to an interviewed trade unionist, are realistic only for managers. Indeed, at *Call Bank*, the existence of several classes of employees leads to frustration and dissatisfaction, which increases staff turnover. (This is also true inside the destination location, where there are some operators on short-term and some on two-year contracts; only the latter can attend internal further training courses.)

In summary, it can be said that the relocation sometimes leads to lower wages; this is for example the case with movements into regions with lower wage levels – *eg* northern parts of some Nordic countries or Morocco, where the personnel costs are 50 per cent lower than in the Southern European country where the work is coming from. In some cases the relocations involve an extension of opening hours and thus lead to more antisocial working hours. However, it is difficult on the basis of these company case studies to make generalisations with regard to a possible worsening of working conditions or wages, since in some cases there was no significant change in this respect. In particular, when nationals from the source country were to be recruited for multinational call centres, the offer of poor conditions would make it more difficult to attract such nationals to a foreign location. Supply and demand of operators to some extent regulates conditions: *Hub*, for example, was only able to recruit enough nurse advisors when the salary on offer was raised.

3.3.3 Open-door policy instead of trade unions?

Staff representatives had no significant influence in most customer service relocations. At *Call4Dublin* the involvement of the works council was able to reduce the 'relocation victims' from 90 to 72 and negotiate generous redundancy terms. The relocation had a positive effect on the staff representation as the conflict with management raised the level of activity and organisation. In some relocations the staff and their representatives were included in the process; these ran by and large more successfully than the cases in which the staff concerned were confronted out of the blue (by management) with a *fait accompli*. Above all, if the relocation led to no job losses at the source or to an upgrading of the task areas there, there was no resistance on the part of the staff representatives.

At some destination locations, there was sometimes dissatisfaction that wages were lower than at the source location. This was the case at *TNT*, which owns and operates a remote location in a Nordic country. Nevertheless, according to the management the operators are making no effort towards a works council or collective agreement, because the open door policy means it is possible to discuss everything. The wage difference, however, is embedded in the context that there is an overall urban-rural wage gap and the cost of living is lower in rural areas. At *Qualicall*, management does not believe that traditional representative bodies such as a works council are necessary;. Instead, on management initiative, 'spokespersons' have been created as intermediaries between employer and employees, although these are relatively powerless in comparison with a works council.

Call Bank represents an interesting case in this respect: alongside an internal call centre in the north of a Southern European country, a second location was opened in another city, where the

operators were paid 30 per cent less, because the destination company was part of the engineering sector (which has much lower wages in its collective agreement than the banking sector does). This wage differential between the two locations led to dissatisfaction and frustration among the staff at the destination location. For the trade union there, representation of the operators is problematic new territory inside the company, where they had previously mainly represented the (partially different) interests of the engineers. Furthermore, the age structure in the call centre makes collective organisation difficult, because many young employees have no contact with trade union culture. Some operators on the other hand regard their job in *Call Bank* as so temporary and short-term that, in their opinion, commitment to better working conditions and wages is not worthwhile.

The young age structure in the call centres is indeed not considered optimal by some companies and a wider mixture is desired. With regard to trade union organisation and plant representation, the youth of the staff (combined with relatively high turnover) is very much to the benefit of management's interests, because little resistance or demand for higher wages and better working conditions is to be expected from people of an age group that is not familiar with, or has been alienated from, a culture of trade unionism or works councils.

The development potential and also the difficulties for unions within the still young call centre sector (and staff) is in some places a hot topic and a dynamic process which, as becomes clear from the following example of *Minicall*, is probably only just beginning.

The **Minicall** study describes the initiatives of call centre staff in Berlin, who are defending themselves on a cross-company basis against breaches of employment law usual in this sector. One representative of a regional authority who was interviewed considers these to be anomalies that should be just as sharply condemned as what had happened in some call centres: '...if I see that call centres are being attacked, particularly call centres that I know very well and where I know there is an excellent working atmosphere and working conditions.' (Z1, p. 15) It is recognised that care has to be taken not to operate under 'early capitalist conditions', while at the same time maintaining the 'flexibility of the sector' — 'these respondents expect self-regulation of an increasingly mature call centre market' (Z1, p. 15) with employee satisfaction functioning as an important regulating factor.

3.3.4 Surveillance of operators — 'Once logged in, every single action of each operator is systematically registered'

Performance control and surveillance of operators are closely linked to the potentialities of the ICT and in many cases acquires a more intensive nature in the course of relocations. The relocation

of customer services is often accompanied or facilitated by the development of routine-based and standardised working procedures, which among other things, reduce training time and make knowledge transfer and telecooperation easier. A further effect of standardisation is, however, the greater opportunity to evaluate the work of the operators. The extensive utilisation of call centre technologies and ICT in call centres leads to operators leaving electronic traces of almost every action, which can be automatically evaluated to the highest degree. Numerous performance indicators are generated on a daily basis and can be broken down at the level of the individual operator. Management in many of the call centres say, however, that there is no individual, only group-related evaluation, because the former would turn the working atmosphere into a dogfight which would have a negative effect on the call centre as a whole. Group-related evaluations are considered to be a constructive method of promoting team spirit and a co-operative atmosphere.

After relocation, source companies are able to carry out remote monitoring of calls and emails. Test calls from outside the call centre are also used: at *Hub*, for example, a market research institute was commissioned to carry out a mystery shopper exercise making 400 calls per month in order to find possibilities for the qualitative improvement of the service. Furthermore, direct monitoring and close clinical governance on site are being carried out to assure consistency of service standards and service delivery across 22 very different sites with diverse population and healthcare needs. For those being listened in to at the destination location, anonymous remote surveillance is perhaps less obvious and unpleasant than being monitored by superiors on site.

On site, the operators' work at the destination call centres is usually checked by co-listening or listening in, where a supervisor with an extra receiver links in or sits next to an operator. In many case studies the team leaders mentioned that the physical proximity in large offices (in which the supervisors also sit) facilitates the continuous supervision of operators, because in the course of the day one would notice any operator's unfriendly telephone manner in any case. Noticeable in this context was that management continually emphasises and explains that methods such as listening in or external calls represent a chance for operators to improve their skills and qualities: according to management, feedback in the course of such evaluation benefits the employees.

Seen as a whole, the technologies provide many possibilities to extend corporate control, which is a major issue for many source companies. On the one hand, the shaping of customer relations is of major importance for economic health, and thus the quality of customer service is of great interest. On the other, close contact with the destination company is considered important in order not to lose the 'feeling' for customer contact and local markets.

Last but not least, it is possible via ICT to precisely evaluate what the operators are doing and how.

3.3.5 Training, turnover and experiental knowledge

Training of new operators in the course of relocations is sometimes scheduled for a few weeks and sometimes extends over several months. The initial training usually consists of passing on call centre skills such as telephone manner and specific specialist knowledge, which is heavily company specific and difficult to acquire externally. Even if this training is relatively brief, in many cases the operators are only considered fully trained after some months, in the sense that they can carry out their jobs competently and routinely. Within the case studies, however, the specialist knowledge required varied according to the service offered, and thus so did the length of the training period.

Relocations often involve an enormous amount of standardisation in the source company, so that working procedures and content can be better transferred to the relocated location and its operators. Often, special data and information databases are developed, whose development can take one or two years. The quality of the preparatory work often has an essential formative effect on the functioning of the relocation. As a whole, the training of the operators is considered to be exceptionally important. 'They are taking care of our customers; they represent us to our customers. So this is a very sensitive issue. That's why you need to train them very well and motivate them.' (Z4, p. 9; IT development director at *Tourorg* HQ). In this connection experiential knowledge is an issue that is regularly underestimated, as it is often implicit and invisible and not registered in formal job descriptions.[1] Here again, the relevance of experiential knowledge in relocations is dependent on the extent of the standardisation of the customer service, and on how demanding and complex the activity in the customer service function is.

In the case of **Parcel**, the back office, in which the tracking and tracing operators have the job of researching the whereabouts of packages, has been relocated. For this work, operators have to contact dispatchers within the world-wide shipping system. This demands research skills which cannot be provided so easily in training: 'The agent then starts to navigate the shipping system.... The agents' expertise is like playing solitaire on Microsoft Windows, being able to send a question to the right person in the distribution system. To know, plan or guess the parcel's next position after it was last spotted. The system gives the agent some facts, but the choices of where to search (who to ask if they have seen the parcel) is a [matter of]

[1] *Brandfree*: 'It appears that skills and knowledge were not as transferable as was first assumed. The lesson learned from this case was that training needs should not be underestimated and that it can influence not just the quality of work at the destination but the whole working relationship between the two companies.' (V6, p. 11)

personal expertise, developed after many years operating within the distribution system.' (M3&4, p. 8) In the view of one national customer service manager, the pan-Nordic concentration had the following effect: 'The relocation of the functions resulted in a loss of company knowledge in the customer service area corresponding to 22 times five years,[1] an enormous loss.' (X2, p. 6)

Apart from the fact that the transfer of know-how and the training of operators at the new location represents a major challenge both for the source and destination companies and for telecooperation, recruitment is in many cases considered a major problem. The manager of *Eurocall* describes this as follows. 'We have an eternal battle attracting new employees with good language skills and, more importantly, keeping these employees for more than the training period.' (X3, p. 15) This can be for the most diverse reasons. The establishment of numerous call centres at one location can lead to inter-company competition between operators; the shortage of native speakers in multinational call centres is likewise considered to be a difficult issue. It might be assumed that the shortage of operators would lead to a rise in pay and better working conditions; this apparently obvious conclusion does not always apply, however. Instead, some companies consider moving to other locations where call centre operators are not yet a scarce, much sought-after commodity; some companies would like to tie in their operators not through higher wages but through trying to improve the working atmosphere (at *Qualicall* for example through setting up fun teams that organise collective events at theme parks). In some of our case studies, the recruitment difficulties had, however, led to a rise in wages: *Hub* was only able to recruit sufficient nurse advisers when it raised wage levels. Similarly, at *Lecky* there were recruitment difficulties at one location, which led to the offer of permanent contracts as well as improved conditions of service at that location and the decision to shift the temporary/permanent staff ratio from 30:70 to 10:90.

Higher personnel turnover implies a cost explosion and also causes considerable difficulties with regard to continuity of the service offered and the internal transfer of knowledge within the call centre. This again endangers customer relations. In the *Call4Dublin* case study it has led to a situation which one of the respondents (giving a perspective from the source destination in a central European country) described as follows: 'In Dublin's call centre the blind are leading the blind.'[2] (W3, p. 13)

Some of this suggests that the call centre sector is in a learning process in which cost-benefit analyses could ultimately lead to call

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1 In one Nordic country, 22 jobs were cut.

2 It was not possible for this particular case to do research at the location in Dublin and it should be added here that this quote reflects on the perspective at the source location.

centre operators no longer being seen as replaceable, interchangeable human resources, but rather being offered better working conditions including more appropriate wages. As mentioned above, however, this requires collective efforts on the part of the employees to stand up for their own interests, irrespective of ostensibly neutralised conflicts of interest (via open doors to management).

3.3.6 Fluttering or permanent — how long do butterflies stay?

Seen as a whole, the impression emerges that relocations are envisaged as long term, or that the intention often exists to relocate customer service activities permanently. After a relatively short time, however, an establishment that was planned for the long term can nevertheless turn out to be only temporary.

- In the case study *GovContact*, it was noted that it is 'impossible to predict evolutions in the field of information supply and, for example, the impact of eGovernment. Political motives can also play a role in the location of *GovContact*.' (W3, p. 4) In some of the cases analysed, political developments may also lead to decisions for privatisation or outsourcing, in which the question of location may be reformulated. In the *Individual Insurance Agency (IIA)* case study there was governmental preference for an internal solution. It was said that in investment consulting concerning state pension funds, it was a matter of governmental authority decisions or state affairs, and that they could not on any account be privatised. The case study researchers noted that this position was probably not held by the whole party-political spectrum and could be *passé* after the next elections. Indeed, in the *IIA* case, soon after a call centre location was opened it was closed again, as the demand for telephone pension-fund investment consulting fell (since the majority of the population had made their own investment decisions). The infrastructure was sold to another company and the employees were offered work with the new owner.
- In some case studies, current changes in the ownership structure (for example at *TNT* or *Call4Dublin*) may lead to company restructuring or post-merger reorganisation, and this may also affect the relocation of customer services.
- At *Tourgoff*, calls for tenders are regularly put out to establish whether the company is getting the best value from *Eurocall*, its outsourcing service provider. As the company is satisfied with the quality of the outsourced work, an extension of the contract between *Tourgoff* and *Eurocall* does not, however, seem to be in danger.
- At *Call4Dublin*, too, the relocation to Dublin is being re-examined after some of the activities have already been relocated back to the central European country. The

problematic process of relocation, together with the continuing problems, may result in a decision for another location. Apart from the telecooperation difficulties, which among other things are due to the low level of digitisation of information and can be solved, the continuing shortage of French-speaking operators in Dublin may favour relocation to somewhere else. At *Cosmopol*, a shortage of German-speaking operators has already led to a decentralising relocation.

- *Sporty*, on the other hand, sees the pan-European concentration of customer services at its European headquarters as being permanent and stable; because of its proximity to a multinational and cultural metropolis, the location is regarded as ideal with regard to the recruitment of native speakers.

In summary, among the cases analysed it is possible to identify the following risks that could lead to further relocation or personnel cuts.

Short- to medium-term. Labour market bottlenecks can arise, either because of a regional call centre boom and the resulting inter-company competition for personnel, and/or because of the establishment of multinational customer service centres that cannot recruit sufficient native speakers. It becomes apparent from the example of the call centre capital Dublin that even in the face of severe personnel shortages, companies are unwilling to take responsibility for training the regional workforce. Fresher, more flowery meadows elsewhere are probably more attractive to the butterflies than the strenuous improvement of the existing location. And it is precisely the high level of digitisation of information and standardisation of working processes that has to be developed for the establishment of the relocated or centralised call centres that can act as a facilitator for potential further relocations. It is thus not only the experience with relocations, but also that relocated work is organised in such a way that a further change of location is more easily possible.

Long-term: Further technological developments towards web interfaces and self-service over the Internet may influence customer behaviour and the demand for live operational support. At *GovContact*, for example, citizens' self-service is being actively promoted and in the course of this a complete question-and-answer database is being opened on the website, thus sparing Internet users some calls to the call centre. At *Call Bank*, too, there is a long-term strategy to establish interactive Internet services, and a change from telephone to multi-channel services. *Eurocall* is investing in speech-recognition systems: 'When these systems are established, the basic inquiries will be handled automatically, leaving only higher-order or more problematic inquiries to be solved by the employees.' (X3, p. 16) These further technological developments imply that the number of operators in call centres will fall and the remaining jobs will involve higher-level skills, which again will mean more investment in training the remaining

workforce. In India, for example, a development from call centres towards help desks is noticeable: the transition from call centre to help desk will also influence the demand for better qualified staff. In line with this trend, a new breed of training and certification institutions is emerging to help companies upgrade.

4. Relocation of the IT Function

4.1 'We want to let our business grow' – objectives of the relocation of software development and data input

The EMERGENCE case studies, though conducted in 2001, were in effect investigating the relocation of *eWork* in the second half of, and particularly the end of, the 1990s. This period was marked by a much-discussed shortage of IT specialists in the European Union member states, a situation that may have changed again in the meantime with the crisis in the new economy and the information technology sector. Some of the case studies reflect such labour shortages in the respective local labour markets. But a second background development should also be taken into account. The boom in information technology, the new economy and telecommunications in the second half of the 1990s not only brought with it a quantitative problem in personnel recruitment, but also a rapid change in the qualifications being sought. It was, or is, not so much a question of the absolute shortage of IT specialists, but that many companies simultaneously need expertise on the very latest technology. And because it has only just come on to the market, few workers already have experience of this technology.

Shortages in local labour market segments have the additional effect of causing increased turnover and wage costs. If the cause of a relocation is the labour shortage at the previous location, then it is mostly closely linked to the cost argument. On top of this, is the fact that there are unattractive companies who are the first to feel it when the labour market situation is more favourable for workers. Thus companies with little to offer IT specialists in terms of learning or career opportunities, and no connections with universities or other training establishments, come away empty handed when attractive companies can still afford to be choosy. In general, small and medium-sized companies from non-IT sectors are particularly affected by a labour shortage.

One example of this is *Betty*, a betting company in a central European country. In what for a medium-sized company was a major project, there was a plan to redesign the company's computer network. It was very difficult to recruit highly qualified software developers because there was no attractive perspective

on offer above and beyond this project. Disadvantages were also seen with outsourcing: alongside the question of control, the danger of loss of know-how and the absence of further development weighed against outsourcing to an IT company within the country. As a result, existing contacts with a CEE university and the presence there of the international parent company were utilised in order to set up a subsidiary for software development in a CEE country. The significantly lower personnel costs were a deciding factor.

A very small Benelux company, a start-up business with less than five employees, felt its competitive disadvantage on the labour market even more sharply. *Web* was unable to afford the prices of IT personnel agencies, quite apart from the fact that it was not particularly attractive to qualified workers. Spurred on by a chance acquaintance with somebody from a CEE country, the company founders embarked on the very difficult route of outsourcing work to a CEE metropolitan area.

As a rule, therefore, a variety of motives underlie any given relocation. However, corresponding to the typology developed in chapter two, we can see significant differences between the various relocation case studies with regard to the causes and objectives.

4.1.1 Labour market-induced or -oriented relocation

Part of the background to the relocation of software development may consist in a company's internal IT capacities being inadequate to the needs of the desired projects. In the case of *Invest*, an insurance company, there was already a backlog of projects. At *Bio*, an IT company, it was no longer possible to cope with the planned development work internally. In both cases, there were also shortages in the local labour market, in the first case primarily regarding the knowledge of Java and in the second more in connection with location in a peripheral region. Both companies chose the option of outsourcing in order to be able to carry out the work at all. Whereas at *Invest* it was not so clear at the beginning where the work would be placed (although other managers in the group had already reported positive experience with Indian software developers, and thus prepared the ground for a decision in this direction), the managers at *Bio* already knew the IT company *Belindus*, in the same small Benelux town, with a branch in Chennai, India, very well. Now their services were called on for the first time. As far as the motives are concerned, in the case study it is reported that 'Finding the necessary resources for doing the work was the major reason for relocating software development to India. In contrast to local labour market shortages at the source, ample staffing is available at the destination. Cost considerations also played a role.' (W2, p. 2)

Invest, on the other hand, wanted to have the software quickly available; possible savings were not a motive. None of the IT companies who made the shortlist for the contract was previously known to *Invest*. *Usindia*, which won the contract, had branches in the US and in India. Relocation to a particular country or particular region was not the intention: 'It hardly mattered to us at all where the project was carried out.' (Z2, p. 5)

4.1.2 Knowledge-oriented relocation

Access to specific specialist knowledge may also be the aim of outsourcing and relocation. Software development is farmed out to specialised companies because the internal skills for it are insufficient and it is clear from the start that these are not to be built up internally. It is therefore not even checked whether the local labour market would make this possible. Thus a museum in a European country contracted the multimedia company *Compass* to develop an interactive guide to its collection. The necessary expertise was not available in the museum and not required beyond the limits of the project. It was therefore a question of finding a company able to create a technically and artistically demanding product. The company's location was of no significance to the museum, apart from the fact that it had to be possible for workers on the project to come in for discussions. A set of circumstances such as the one that led to the outsourcing and relocation of work to *Compass* is very common, as further case studies in the multimedia and web design field show. The Southern European company *Microweb* works for major international companies that farm out the design of their Internet presence. In the *Interned* case study, a trading company put the redesign of its website out to tender as a project and the geographical relocation arose from the nationality and locations of the successful subcontractor.

The Southern European credit institute *T-Bank* was developing an increasing number of Internet-related activities. These placed new demands on the internal information systems department. The recognition that these demands could be better dealt with by a specialist company led to the outsourcing and consequently the relocation. 'The solution was outsourcing to a multinational whose main mission is the creation and implementation of hardware and software systems.' (S5, p. 3) Additionally, it was expected that such a solution would speed up development times and improve reliability as well as reducing costs. In this case, however, not only the work but also the personnel were relocated. The IT company *SIS* took on the 240 staff from the *T-Bank* information systems department. In this example, 'access to knowledge' as a motive for the relocation concerns the expertise of an organisation as a whole and not so much that of individuals, inasmuch as the same workers deal with the demands better under a different management and in a different organisational environment. In this case, relocation only happened because the

work is now carried out at the *SIS* headquarters, which is in a different city to the *T-Bank* branch in which the department was previously based. Geographical relocation was not the aim of the measure, but neither was it a disadvantage. Even before, the information systems department was not based at the same location as the bank headquarters.

4.1.3 Relocation to reduce personnel costs

For the company, lower personnel costs may not only be a welcome side-effect of outsourcing and relocation to cope with the problem of a shortage of personnel resources. In many cases the primary aim of relocation is to take advantage of lower wages in order to cut costs. To this end, software development or data input are relocated to central and eastern European countries or to India and other non-European countries. This can take place as an isolated measure or in the framework of company reorganisation. Pressure on the parent company or management to cut costs, coincides with perceived relocation options. This pattern can be well illustrated at the airline *Flighty*. As cost reductions were being called for, it had its eye on the relocation of data input to India, where a partner airline was already operating a company for this purpose. Six months before the relocation, the processing of flight ticket details was transferred from punch cards to online input; geographic relocation thereby became possible. As personnel costs in India were less than Euros 1,200 per month, it paid to take on board the one-year preparation time and the immediate relocation and outsourcing costs. The situation of *Madadata*, a data input company that exploited the 1:10 wage differentials between a European country and Madagascar, is a similar case.

The software-development company *Crownsoft* chose the neighbouring central and eastern European countries in order to gain access to their lower personnel costs. Calculations showed that, taking all costs into account, relocation to India would only be slightly cheaper. The geographical proximity and existing contacts made locations in central-eastern Europe seem more attractive. The relocation in this case arose from the fact that the management of a major software company decided to stop expanding in the source country, and built up its branches in neighbouring countries. A shortage of workers was not the cause, as the company had excellent contacts with universities and had no recruitment problems. The motive was primarily cost cutting.

Paul, is a case of relocation of IT work from a Southern European country to Ukraine, the main incentive being also the significantly lower personnel costs of analyst/ programmers. What is interesting in this case is the fact that the relocated work did not involve the completion of current projects but the implementation of relatively large, labour-intensive, innovative projects, on the basis of which the company expects to enhance the variety of products it offers to the market.

In the *Secure* case study it was established that labour costs in India are 80 per cent lower than those in a Benelux country. On the other hand, additional costs arise from outsourcing and relocation and from extra work in the outsourcing company in the field of specifications and quality control. As a result, the actual cost reduction at *Secure* remained at 50 per cent. If more projects are outsourced in future it is conceivable that the savings will be greater. What emerged as an additional cost saving at *Secure* was the increase in quality: contrary to the original fears, the results of work from India were not worse but better quality. Thus, in the development of a system for recording working hours, *Secure* not only saved Euros 400,000 and received more program versions, but also got an error rate 17 times lower than the contractually agreed one. The *BioBelindus* case study showed that the wages in India were indeed only one-third of the amount in the Benelux country, but the costs of outsourcing and relocation (*eg* induction and control time, daily communication, negotiation with the outsourcing partner, *etc.*) meant that the projects carried out in India were only slightly cheaper than those in the Benelux country.

4.1.4 Centralisation to exploit economies of scale

In the IT function, too, there are relocations aimed at consolidating tasks at one site in order to exploit economies of scale. The infrastructure for data transfer and the opportunities for remote maintenance of software, make it easier to consolidate computing centres and geographically concentrate the work. At *ITcomp*, a company that acquired and amalgamated computing centres in a European country, the staff at one computing centre were able to move from one of the company's locations to another, although the equipment they were using was not initially shifted with them. In this case it was also observed that in the restructuring process, larger units have the advantage that they survive more easily and are more likely to have additional tasks transferred to them. The geographical relocation thus arises out of the geographical distribution of the (acquired) computing centres and is not immediately derived from the advantages or disadvantages of location.

The advantages of centralisation may also lie in the area of knowledge management and the attractiveness for IT specialists. As the example of a group of banks' jointly-owned IT subsidiary shows, a specialist unit is more easily able to deal with the demands of technological development.

The case of *Cosmed*, where the IT function has been centralised at the headquarters of one European country, shows the co-existence of these two motives, *ie* to exploit economies of scale as well as the creation of advantages in the area of knowledge management and the attractiveness for IT specialists. The latter can be identified by the fact that the new central unit is partly staffed by the most

highly qualified IT experts who previously worked at the subsidiary companies.

The motives for the relocation of the IT function thus reflect the whole spectrum described in the typology in chapter two. Access to knowledge and the opportunity to recruit specialists, however, plays a particularly strong role in this function and the corresponding labour market segment. Occasionally, different motives can be established within the same relocation, depending on whether one looks at the decision of the company management to invest in another country, or the decisions of the project managers to relocate work to a different location. Whereas in the first case cost reasons are decisive as to whether the subsidiaries are set up in central-eastern Europe or in India, or whether outline contracts are agreed with Indian software companies, in the second case access to personnel resources and specialised knowledge are decisive. Especially in the sphere of IT functions, and particularly in software development, it is important to distinguish in this way between the creation of capacity and the actual relocation of work.

In the case of the insurance company *Secure*, a project group was set up to investigate the possibilities of relocating software development projects to India with the aim of cutting costs. Because of the scepticism of the business units the result was negative. Only a second project group with a different composition arrived at the conclusion that the company management actually wanted. The 80 per cent lower personnel costs, the high level of qualification of Indian IT specialists and the good technical infrastructure of Indian companies led to the basic decision to outsource to India. The criteria established were, in particular, quality, CMM (capability maturity model) level, size, credit-worthiness, personnel turnover, management style, development methods and instruments, hardware, location and working conditions. There were then negotiations with possible Indian contractors, which finally led to general agreements for software development projects with three Indian firms over five years. Size and location ultimately played no role in the decision. No work was yet relocated with the signing of the co-operation agreements, however. This took place on a project by project basis through the business units, with each of these placing a development contract. Because of the scepticism of the business units, the company's central IT department had to lead the way in outsourcing projects. Only when good experience with the Indian partners had been established did the readiness to relocate work increase. The initial resistance was not based on the possibility of jobs being lost in Europe (the relocation of work was at the cost of external partners). There was rather a prejudice with regard to the quality of the work.

At *Crownsoft*, too, two levels should be distinguished. The company set up subsidiaries in central-eastern European countries

in order to create cost-effective development capacity. The relocation of work only took place, however, if parts of projects were being carried out at the new locations. As the project management was in this case primarily retained in a central European country in the first years, the actual relocation, and thus the extent of cost saving, was conditional on the readiness of the project managers to incorporate workers from the neighbouring countries in their projects. Because of the poor control possibilities, language uncertainties and the travelling required, this was not very well liked by the project managers. Initially, workers from the new plants in the neighbouring countries were therefore brought to the central European country (source company) and integrated in the project teams. This was also much favoured by the developers from the subsidiaries, because the bonuses and *per diem* allowances almost doubled their incomes. But the company could not really realise its saving opportunities in this way. For management, the decisive challenge in the relocation process consisted in achieving actual outsourcing of project work to the new subsidiaries. One means was to limit the opportunities for seconding personnel to the source company, while simultaneously ceasing to take on new staff there. Thus if the individual areas wanted to achieve their turnover targets and carry out their projects, they had to call on the capacity in the subsidiaries and relocate work to them.

In the case of *Globecom*, the company management in the US had founded a software company in India with the aim of exploiting the cost differentials with the US. The actual relocation of work that was investigated in the context of the EMERGENCE case study came about because the unit in one central European country could not find enough qualified software developers on the labour market for its growth strategy. But in this case, too, management attempted to effect a relocation of project work through instruction: 'You also got objectives passed down: "try to do something with India".' (Manager at *Globecom*, Z3, p. 11)

4.2 'After all, outsourcing work to India is a very drastic decision' — organisational and cultural aspects of relocating software development to India

When the relocation of software development to India is discussed publicly, then it is primarily the low wage costs that are mentioned as the reason for moving. On top of this is the large number of IT specialists in the country, while there is a shortage of such workers in the EU and the US. As already explained, in this regard there is in fact a very considerable cost difference. In addition to the cost advantages there is also quality as a motive for relocation to India. The background for this is twofold. The first factor is the high level of training of Indian IT specialists. The ratio of university graduates in Indian companies is usually higher than in their European counterparts. The second results from the

exceptional organisation and quality management of Indian plants. According to the capability maturity model (CMM) of Carnegie Mellon's Software Engineering Institute, 27 companies world-wide achieve level five: 19 of these are in India.[1] The efficiency of the software development process and its constant improvement is assessed according to this. (W4, p. 3)

There are a number of hurdles to be overcome, however, for a company to be able to exploit the advantages of the relocation of software development. Thus relocation requires thorough organisational preparation. At *Bio*, all developers who had already had something to do with outsourcing to India in other companies were called together for discussions. The experiences were mixed. One major lesson could be drawn from this exercise: don't underestimate the work at the source. 'Success depends on very active monitoring of the remote activities.' (W2, p. 4) In addition, as was emphasised at *Secure*, among others, is the fact that European contractors often do not say clearly enough what they expect from the developers. These are difficulties that crop up with all outsourcing. At *Invest*, too, there was the experience from the outsourcing to the US that the projects needed to be essentially better prepared and the requirements more precisely specified than for internal software development.

In the relocations to India, however, cultural differences come into play. According to European perceptions, as recorded in these case studies, the hierarchies in Indian companies are more marked, the social distance in the companies is greater, which also appears to be related to the caste system. In the case study on *Globecom*, 'the [people from the source company] described some problems related to different ways of communication and different cultural influences regarding hierarchy: "The Indians believe very much in hierarchy. If a superior is sitting there, they never say anything other than what he perhaps wants to hear".' (Manager at *Globecom*, Z3, p. 10) This issue comes up again in other case studies. An outsourcing partner of *Secure* has three locations and initially, communication always had to go via the deputy managers in charge of the locations. After this proved not to be very efficient, *Secure* insisted that it was possible to communicate directly with the developers.

But direct communication across cultural boundaries also has to be learned: 'Our [Benelux] respondents found the Indian IT workers to be characterised by high intelligence and a very good educational background; very academic and experienced. They also found, however, that their cultural background makes it very difficult for them to say "no", for example if they don't understand something – especially when speaking to a foreigner. *Secure* employees have therefore found it necessary to keep on probing

[1] The number of companies getting CMM level 5 certifications (and hence the figure given above) is rising each month.

for comprehension.' (W4, p. 7) At *Globecom*, too, there is the impression that the Indian developers, in particular the younger ones, only hesitantly admit that there are difficulties, that for example they need training for a new development tool. (Z3, p. 10)

On top of this there are comprehension difficulties that are attributable to the accent and form of expression in English. 'What you have to struggle with a bit at the beginning is that the Indian accent is very different. You get used to it in a few weeks or months, but many colleagues here say "We actually don't understand very much". Often you say "Can you say that again?" We then mostly say "It's a very bad line. Can you say that again? There's still a lot of noise on the line!" It is a difficulty, but not a massive problem.' (Manager at *Globecom*, Z3, p. 7) Nor does the somewhat inadequate telecommunications structure make understanding easier: 'We are continually telephoning India. For each call there's a broken line and you have to redial. But it's good enough for making oneself understood (Manager at *Globecom*).' (Z3, p. 11) Another experience at *Globecom* was that Indian IT specialists have only limited mobility. This mainly concerns women, who will not get permission from their families or husbands to go on a business trip to another country. In case of employment in the US, travel is mainly only possible with a hire-car, however. 'Some Indians have a chauffeur; many take a taxis, I think only few drive themselves.' (Z3, p. 12) This has caused occasional difficulties at *Globecom*.

One has to get used to the cultural differences in everyday working life. As the companies' experience has shown, this should not however, be left to the individual to deal with on their own. Rather it should be a core issue in the relocation project. At *Secure*, an anthropologist is giving Benelux employees courses on Asiatic cultures. In the Indian companies 'westernisation' courses are offered.

The comparatively high personnel turnover in the Indian software companies causes greater difficulties than the cultural differences. Because of the large number of software companies in cities like Bangalore or Hyderabad, staff can change jobs very easily if work elsewhere seems more attractive. At least until the crisis of the new economy many IT staff were going to the US. Because of the loss of expertise, the migration of workers, particularly from current projects, is a very big problem. This is avoided, the case studies showed, in that the companies attempt to be as attractive as possible for the software developers. Thus the start-up team at *Belindus* had learned from earlier mistakes and paid a great deal of attention to the choice of location within Chennai: it had to be an attractive building in a good district. Nor were there any shortcuts on equipment, but the latest technology was procured regardless of whether it was absolutely necessary for the project.

The company must thus be attractive in order to attract highly qualified workers. 'If we want to remain an attractive employer in India we will have to grow. We cannot grow more slowly than our competitors in Bangalore ... If we grow more slowly, we will lose attractiveness.' (Manager of *Globecom*, Z3, p. 14) The question of attractiveness as an employer was one reason why *Secure*, an insurance company, did not set up its own subsidiary in India, but outsourced to IT companies. To keep staff turnover low, companies also attempt to design the work itself in an interesting way for their staff. Here, in particular, technical learning opportunities are particularly important because, according to case studies, the Indian IT specialists are very much interested in their employability. On the other hand, staff accept the long and inconvenient working hours. Thus in the Indian companies, there is not only a long hours culture, that is, much more overtime is worked than in the European companies, but the working hours are also adapted to European time, which involves night work. Given interesting work, long hours can also be regarded as a learning opportunity: 'In view of the poverty many Indians face, IT workers view their position as a gift, so they are extremely motivated and stimulated to exploit their talents. Spending long hours at their work also allows them to maximise their learning.' (W4, p. 13)

The similar positive experiences that European companies have of the high level of qualification of Indian workers relates to the educational level and information technology expertise and experience. With regard to other qualifications, the view is not so positive. Thus *Globecom* requires developers who not only have excellent technical expertise, but can also give presentations and advise customers. Experience shows that the skills for this are not very widespread. Because of the lack of social skills, *Globecom* offers courses, but these are seldom attended. 'People are not open to it. They say, 'I don't want to do anything but develop software with the latest software tools.' If you put them in consulting on integration projects they're not happy.... You have to employ Indians where they feel good, and not, as we always think, where we need them.' (Manager at *Globecom*, Z3, p. 12) The experience of *Globecom* is that projects with division of responsibilities in which the preferences of the Indian staff are taken into consideration are easier to manage.

The Benelux subsidiary of the IT company *Bio* also has software products developed in India in open-ended co-operation with *Belindus*. But because of the intensive customer contact required, customer-specific development projects continue to be carried out in the source company in the Benelux. The interesting contrast to the *Crownsoft* strategy, which has developed subsidiaries in central and eastern Europe, consists of the fact that *Bio* has not relocated parts of projects, but all tasks involved in a product development. *Crownsoft* workers in the CEE province complain about the monotonous work because 'the most interesting work

stays in [the source country]' and even the branch in the CEE metropolis has more interesting jobs. *Belindus* consciously avoids sending only the simple tasks to India and keeping the more demanding ones in the Benelux. 'This is a deliberate strategy of *Bio* and *Belindus*: offering rather interesting work, not only to attract good IT workers, but also to keep them motivated and thus reduce staff turnover.' (W2, p. 10)

The EMERGENCE case studies did not just investigate the relocation of software development projects. The following case concerned the relocation of data input: *Flighty* used *Coup-Mum*, the subsidiary of a partner airline, likewise to have its flight tickets processed in India. Thus they were not only able to base decisions on previous experience, but also to consolidate a contract with a European associate. The actual implementation of the data input in the Indian operation, however, involved close co-operation between *Flighty* and *Coup-Mum*. Thus, comprehensive training was undertaken in the start-up phase. Nevertheless, it became clear that the staff in India did not learn to deal with the work as quickly as had been expected. This was not a result of low qualifications – on the contrary, school education levels are comparatively high – but due to the fact that the necessary experiential knowledge was underestimated. 'Initial problems in the specific work arose primarily in city and airport abbreviations and currencies: dealing with the various currencies and a feeling for whether the decimal point was in the right place are extremely important for work in revenue accounting.' (Y1, p. 9) *Flighty* employees repeatedly flew to India for a week in order to train the *Coup-Mum* staff. The software was also changed in order to be able to get by with less experience (additional plausibility checks, automation of input steps).

Some 60 jobs at *Flighty* were cut in the relocation, leaving the core team of the previous department to cover the remaining functions. The same subsections were set up at the outsourcing partner in India, with one manager responsible for the whole service for *Flighty*. The remaining staff in the central European country check the data processing, among other things, and carry out advisory and specialist supervisory functions for the Indian staff. Despite the geographical and cultural distance, as well as the still purely indirect contractual relationship between *Flighty* and *Coup-Mum*, the co-operation has led to the development of close relationships with the colleagues in India, particularly among the *Flighty* staff, who had initially frequently gone there for training purposes. When the majority of the data was no longer entered by hand, but scanned in, and consequently some of the work was further relocated to a location in a CEE country, the organisational relationship to the outsourced department changed drastically. The outsourced service is now only calculated by the units of data processed, and not according to the personnel employed; the operative management by *Flighty* no longer applies. Although the new location is only an hour's car drive away from the *Flighty*

headquarters, the *Flighty* staff do not know the workers in the CEE country and have nothing to do with them in terms of co-operation.

As the EMERGENCE case studies show, there are different variants of the route to India. Direct outsourcing to companies in India, or to companies with locations in India with which there has been no previous contact and are selected through a tendering process, only represents one of the possible variants (*Secure, Invest*). As there is widespread initial scepticism concerning the success of such a measure, the attempt is made to build up trust in the outsourcing or relocation through the organisation. One possibility consists of using companies that have branches in India and with which contacts already exist (*Belindus*). In other cases, the contract has gone to an IT company in India that belongs to the same group (*Globecom*) or to a partner company in a strategic alliance (*Flighty*).

At *Bio*, although it is also an international company, there were no connections with India before the relocation. The relationship of trust with the management of the Benelux-Indian IT company with its base in the same provincial town as the Benelux branch of *Bio* was a decisive precondition for the leap to India. 'After all, outsourcing work to India is a very drastic decision. There is a big distance between [the Benelux country] and India, in the literal and figurative sense, and in this respect it is very important to have the necessary ties, to understand each other, to have the same business mentality *etc.* Without the existing business connections, *Bio* would not have engaged in its Indian adventure that rapidly.' (Manager at *Bio*, W2, p. 4)

Relocation to India is not a drastic decision for everyone. At the international IT company *Globecom*, the paramount division is into business units not into country-related companies. The jobs in a business unit are internationally dispersed, and co-operation over distance is usual. The incorporation of the company's Indian subsidiary was therefore not seen in the European country as relocation of work at all but business as usual.

The experiences of relocation to India were overwhelmingly positive, above all as far as the qualifications and the commitment of IT specialists in India were concerned. It became clear, however, that for successful relocation, a learning process related to forms of division of labour, formalisation of project work, communication and cultural aspects of co-operation, is necessary inside the company. In the cases studied, the considerable differences in personnel costs meant that overall cost savings were achieved despite the relocation and management expenses. The extent of these savings varied greatly, however. Drawbacks to relocation to India arise from the comparatively high turnover of IT staff. The companies thus attempted to design the work so that it was attractive for the Indian software developers. From this, and the concentration of the qualification profile on technical

expertise and experience, it follows that it is neither sensible to relocate just the simple (coding) work to India, nor is it likely to be promising to relocate customer specific development of software, in which more intensive interaction is needed.

4.3 Employment and labour relations

In the replacement type of relocation, the immediate effects on employment in the company of origin or at the location from which the work is relocated are given by definition. Jobs are, in the narrow sense, shifted from one location to another. The question thereby arises what the consequences are for the staff who were previously employed in these jobs. If they remain in employment, then the issue is one of new conditions and areas of activity. If employment is ended, then it is the conditions of termination and options on the labour market that are of interest.

ITcomp bought a computing centre in a European country, which was the object of the case study, from an auto-industry supply company in the first half of the 1990s, and now offered the IT service to them as an outsourcing partner. At the time, the conditions for taking on the staff by the new employer were negotiated with the trade union and an agreement on this was concluded. The employees were re-employed by *ITcomp* on the same conditions.

An outsourcing case in a Southern European country shows a similar pattern. In this outsourcing, the IT staff at *T-Bank* were taken on by an international IT company. The question of which collective agreement these workers were in future to be paid under sparked off a conflict; the transfer from the banking to the engineering collective agreement, which the IT company had planned, would have led to significant disadvantages for the staff. The negotiations between the companies, the trade union and representatives of the staff concerned, led to the result that: the banking collective agreement is to be applied to all present and future staff; that the employment regulations of the bank, including wage and pension rules, remain in place; that transfers within the IT company are only permitted with the agreement of the staff; that staff numbers are to be maintained; and that the staff transferred can return to *T-Bank* for family or personal reasons for up to three years after the takeover. At the time of the case study, about a year after the relocation, it seemed that the agreement might be losing its significance. The staff saw themselves increasingly as IT service workers who could also work for other clients. The IT company offered incentives to the staff who would agree to flexible working hours or transfer to the company-specific wage scheme.

At *Flighty* there were ultimately 60 jobs affected by the relocation of flight ticket data input to India. As with *T-Bank*, the announcement of outsourcing triggered uncertainty. This was

calmed by the announcement that no one would be made redundant and, somewhat later, by the decision on who would belong to the core team that was to remain in the department. The superfluous staff were transferred to other departments in the company. Some staff left the company of their own accord.

In the expansionary type of relocation, new jobs are created at other locations without being intended to replace those at the original location. In principle, employment is thus maintained, but there is an extension of jobs in another region. For a number of reasons, expansionary relocations also have consequences for employment in the company or region of origin. On the one hand, the relocation as a rule leads to organisational changes. Newly emerging divisions of labour between the locations or between the internal departments and the outsourcing partners can change the character of the jobs, which means a qualitative change in employment. A quantitative change can also arise, in which the initially expansionary relocation grows into replacement relocation. This is the case if an outsourcing or relocation of work that initially took place on an *ad hoc* basis because of the lack of internal capacity turns into a systematic outsourcing strategy. This results in internal IT jobs being reduced. It is also plausible to assume that, with increasing size and independence, companies set up in regions with lower wage costs can become competitors for the jobs that were originally not threatened by the outsourcing.

Complementary relocations of software development are often justified by the argument that the additional jobs in another region, in particular in other countries with lower personnel costs, lead to more jobs at the original location because they have made it possible for the company to grow. This may be the case in two different variants of expansionary relocation. Both labour market-oriented or -induced relocation and cost-oriented relocation may lead to higher business growth than would have been the case without relocation. The increased turnover can again contribute to ensuring or expanding the existing jobs.

At *Invest*, located in a European metropolis, work was farmed out because of an urgent need for development capacity that was available neither internally nor in the region. As a result, an increasing number of projects were transferred to outsourcing partners. This changed the character of the activities in the internal IT department: development of their own software declined in favour of co-ordination of external software development. Fewer software developers and more business analysts were required. The pressure on staff is rising. 'At the moment we have a lot of people who are afraid of change. There are developers who want to stay developers all their lives. Someone who wants to be a developer always wants to work on large-scale, innovative projects. Because of outsourcing this is in a way no longer possible ... We expect them either to take their share of the changes or go somewhere else.' (IT manager, *Invest*.) The change in the

qualification profile required caused considerable problems in this case. Half of the team of about ten people that was most affected by the outsourcing left the company. Above all, older employees and purely technology-oriented people did not want to, or could not accept, the new demands. The outsourcing led to confusion and mistrust in the department and caused staff to plan to set up a works council. Management was quicker and established a 'confidence-[building] team'. In this case the change did not take place in a satisfactory way. 'If we were to start again, we would certainly try to explain the processes better and to involve employees more.' (IT manager, *Invest*)

Crownsoft

The company [redacted] is pursuing a comprehensive expansion strategy in the neighbouring central-eastern European countries. The management argued from the beginning that expansionary relocation did not endanger domestic employment, but rather guaranteed it. The mixture of high and low wages would make the company more competitive through lower prices, and thus able to maintain or increase its turnover. In terms of numbers, after strong growth until the mid 1990s, employment remained more or less stable. Company management had been putting more pressure on middle management and project managers to relocate project work to the new subsidiaries across the border by stopping domestic recruitment. Consequently there was a slight personnel increase in some years, and in other years a fall in staff numbers through retirement or staff turnover. Seen qualitatively, programming work was relocated to the new location, while project management tasks were kept at the source location. At the beginning this meant an increase in demanding tasks. The work for some programmers dried up and they were transferred to other jobs in the company. The halt in domestic growth reduced career chances. Anyone who was after a top position had the opportunity to raise their profile by developing or managing a new operation abroad. One feature of the location in the source country was very positive for the expansion process. Some [redacted] employees had emigrated to the source country from the neighbouring country several years beforehand. Now, in order to fill leading positions in the foreign subsidiary, management was able to call on people who were both fully familiar with company practices as well as knowing the language and culture of the neighbouring country.

The role of the subsidiaries is changing. At the beginning they were a de facto 'extended workbench', because their personnel capacity was used according to need for projects that were planned and managed from the source company. This had disadvantages for staff at the new locations. 'In my view the best tasks are in [the source country], because that is where work is distributed at a higher level. One of the disadvantages of [town name] is that we get the worst type of work here, even from [the country's capital].' (programmer, Q3, p. 10) The subsidiaries are increasingly striving for qualified tasks and more independence. As soon as alternative employment for software developers, or even competition on the labour market, arises in the region, [redacted] will have to take account of the dissatisfaction with the subordinate role and monotonous work and take measures to counter it. As a first step, responsibility for parts of projects is being transferred, and subsequently complete projects, including customer

contact, are to be carried out at the new plants. Finally, as company management emphasises, it is also conceivable that the management of business areas will migrate to a new location. In the source country, the foreseeable trend towards upgrading the subsidiaries in the neighbouring CEE country is leading to the worry that serious competition will emerge there in a few years time. 'Of course, we see the risk in developing our own competitor. I have already discussed this with the managing director several times. What happens if our customers decide to employ the subsidiaries directly?' (Works councillor at *Crownsoft* p. 7)

Whether one looks at the locations for software development in India or in the central-eastern European countries, the general trend is in the direction of the upgrading of the new plants, in the sense that they are granted more independence and that more responsibility for whole projects is transferred to them. In India this has very much to do with the situation on the labour market. The companies must endeavour to be attractive for highly qualified IT specialists. Of course, there are sufficiently high qualifications and organisational processes there that make it possible to take on high levels of responsibility. The limits are in the relatively high staff turnover and the usually still difficult co-operation between Indian IT specialists and European customers.

However, in the central and eastern European countries, too, the trend towards the upgrading of software plants to simplify organisation and increase staff motivation can be observed or is to be expected. Thus, staff turnover has also recently become an issue in the capitals of the central-eastern European countries, and the outsourcing strategies here are changing: it is for example one of *Crownsoft's* objectives to upgrade the locations and devolve responsibility for projects to the subsidiaries.

If one looks at the effects of relocation on employment, then the company-specific view does not provide the whole truth. It is after all conceivable that employment in a company remains stable or even expands despite relocation measures, but that jobs are lost at a competing company that comes under pressure from the lower prices of the relocating business. This is argued for the data input sector in the case study of *Madadata*. By the development of a plant with 200 jobs for data input in Madagascar, no jobs in the European country have been directly replaced. In the (expansionary) relocation, it is namely a question of the new establishment of a company. However, by the lower costs achievable – in Madagascar wages are only a tenth of those in the European source country – data-processing companies in the European Union can be undercut. 'This strategy of relocation of data processing activities puts [source country's] wages under pressure. Part of the [country name] workforce, young, with good school-leaving qualifications, is put in competition with the workforce in developing countries with regard to 'up-level tasks' in data processing.' (P1, p. 6)

5. Organisational, Technological and Employment Aspects of Relocation

In this chapter we will summarise the main findings in terms of organisational, technological and employment aspects of the relocation of *eWork*. We thereby intend to address facilitators and barriers of relocations, as well as the organisational and employment consequences, both at source and destination companies. As the main impacts on the customer service and IT support and software development functions were already presented in previous chapters, we will only briefly cover them here.

5.1 Facilitators and barriers of relocation

Among the sample of case studies, both the organisational decision-making contexts and the triggers of the relocation measures varied widely. Regarding organisational preconditions, the typology developed in chapter two of this report helps to distinguish between the different constellations. Three distinct patterns are most important in this respect:

- *Relocations supported by parent companies, alliances or associations of firms.* If a relocation takes place within an international group of companies, the required contacts, infrastructure or the legal frame can often be provided by the parent company. This also relates to organisational and technical support. The company *Betty*, for example, managed to set up a software development company in a CEE country within six weeks, thanks to the existing contacts and to the support by the international parent enterprise already operating at the chosen location. As described in chapter four in detail, the infrastructure provided by the world-wide parent company greatly facilitated the expansion of *Crownsoft* into the central and eastern European countries. Similarly, *Flighty* could use the Indian subsidiary of an alliance partner company to relocate data entry tasks. In the case of *RegioBank*, the savings banks set up a joint computing centre, a venture that was heavily supported by the tradition of co-operation within the savings bank association. We argued in chapter two that we have to distinguish between two phases or aspects of the relocation: first the setting up of a company or unit in a

different region or country; and second the actual assignment of work to this unit. The circumstances described in this paragraph imply that phase one is made easier or even completely carried out by the parent or partner company. This is a big advantage compared with SMEs that have to build up contacts, infrastructure *etc.* from scratch.

- *Concentration within a group of companies.* While the above mentioned examples partly concern relocations as isolated measures or moves to expand and decentralise the organisation, this type implies the geographical concentration of particular activities. International companies such as *Sporty, Cosmed, Call4Dublin* or *Parcel* decided to move the IT support or customer service tasks from the various subsidiaries in different countries to one central facility, for example, at the company's (regional) headquarters. In this case, organisational facilitators and barriers stem from the micropolitics of organisational change within the corporation. While the strategic decision by top management can certainly be seen as a facilitating factor, opposition from local management or workers may constitute a barrier.

- *Isolated outsourcing projects and relocations by SMEs.* These cases are mainly characterised by a lack of any support such as that observed in groups of companies. Even if a permanent relocation of work is envisaged, the process starts through the definition of an outsourcing project. Service providers are sought via existing business contacts or formal calls for tender. The following example shows the path followed by a small start-up company to find and to start co-operation with programmers abroad.

WebMagy

Founded in 1995 by two brothers, the company offers Internet related infrastructure and website design. Unable to recruit skilled personnel in the Benelux, [redacted] used a coincidental acquaintance with a person from a CEE country living in the Benelux to look for software companies in a CEE country. It turned out, however, that no established CEE company wanted to co-operate with this new and small Internet start-up. Looking for freelancers, [redacted] contact found a young IT specialist who had not even finished his studies at the university. This person, in turn, involved his friends in the business. At least at the beginning, the actual co-operation was very difficult, too. The five persons working for [redacted] in the Benelux are all working from home as there is no central office. The same goes for the programmers and web designers that were hired in the CEE country.

In the absence of a clear division of labour and of standardised and formalised project procedures, this quite often caused problems in the information flow, which in turn resulted in severe delays in project work, in particular at the early stages of the relocation. At the beginning, the communication of the client's needs to the CEE programmers and web designers nearly took the form of the children's game Chinese whispers. 'The contact person in [the CEE country] wasn't speaking a word of English, so everything had to be translated

by the contact person (from the CEE) living in the Benelux. This interpreter had to be briefed first. This was not so easy because he wasn't an IT specialist. After having explained everything to the project manager in the CEE country, this latter person had to take care of the dissemination to the programmers actually doing the work. All these translation operations, literal as well as figurative ones, resulted in a loss of information and in the end insufficient understanding of what the client actually wanted.' (W8, p. 9) After the first projects, Web managed to reduce the number of interfaces. But also in terms of control, the company had to learn some hard lessons. While at the beginning there was no monitoring at all, project managers at Web later demanded daily work reports from the programmers in the CEE country. This was soon replaced by weekly telephone discussions and by more frequent face-to-face meetings. In particular, the relocation of web design in addition to programming required more intensive interaction.

One of the most important lessons that can be learned from the EMERGENCE case studies relates to the demands that relocation of *eWork* puts on organisations. In particular, the customer service cases showed that the following organisational characteristics facilitate the shift of part of an operation elsewhere: a high and clear-cut division of labour, a high level of standardisation, and a high degree of digitisation of information. Severe problems or even failures of relocations are likely if the relocations have not been thoroughly prepared, if the actual division of labour deviates considerably from the formal one, if there is a large number of interfaces, or if part of the necessary information exists on paper only.

The case studies on the software development function also highlighted the importance of organisational dimensions like specialisation, standardisation and formalisation. The general experience with outsourcing and relocation projects is that source companies have to invest more in the specification and documentation of tasks. Depending on the size, age and culture of the company, the organisational structure and the work routines may facilitate or hamper the relocation of work. If we ordered the case studies on a bipolar axes one extreme would certainly be represented by *WebMagy*, the small start-up company in the Benelux described above, which is lacking nearly all the bureaucratic structures we usually find in bigger and more mature organisations. In contrast to *Web's* experience, large international companies do have organisational structures and routines in place that facilitate the relocation of some of the work. At *Crownsoft*, for example, there is the well-working tool of a formalised, company-specific method of software development which was first developed to support cross-border projects for clients abroad. In the recent relocation of programming and software development work to central and eastern European countries, the systematic preparation of projects and the high level of formal specification turned out to be advantageous. Nevertheless it was experienced by several source companies that outsourcing and relocation result in additional work for them.

This is due partly to the preparation for the movement of work and partly to the need for communication, monitoring and control.

Some of the experiences made in the customer services and IT functions are also reflected in case studies covering other business functions. It is crucial that the delocalised work can be delimited in an unambiguous way. In this respect, both the overall organisational features of the company and the work organisation in the departments or units concerned are important. A Southern European case study on the relocation of marketing activities, for example, stresses this point. 'The organisational structure of *Webnet* is based on a network company model where there is a high level of division of labour, task standardisation and integration between various functions. It can be stated that the high level of division of labour and standardisation facilitate distance working.' (S1, p. 7) This is not only a company specific feature but goes for large parts of the media industry; outsourcing and co-operating over distance are traditional ways of organising, and therefore the structures of the company and the organisational culture in general facilitate the relocation of additional activities.

Also in the case of the museum that outsourced the development of a multimedia guide to *Compass*, there is a tradition of co-operation with external specialists on particular projects. Creative functions in general are quite often carried out by specialist companies or freelancers. Therefore fewer problems are to be expected in delineating such tasks and shifting them to a different location. There are however, limitations that became obvious in some of the case studies. The first relates to the necessity to present and also to discuss designs that cannot be transmitted electronically. The publishing house *Childy* outsourced the pre-press and press activities for children books to south-east Asia. Although the pre-press phase is well delineated and highly digitalised, the quality of the work cannot be controlled via ICT alone. Drawings need to be checked on the basis of a copy on paper so that the colour combinations can really be assessed. Large geographical distance makes this more time consuming. On top of this, cultural differences also act as barriers for the relocation of some creative work. At *Childy* the experience was that 'Asians tend to use more vivid and sharp colours whereas the Europeans prefer more soft and mellow colours.' (W7, p. 6) A similar experience was reported by companies producing websites. They farm out programming work to India, for example, but are reluctant to relocate web design tasks as well. The cultural background is said to be important to be able to judge the appropriate design for the website of an agricultural co-operative or the municipality of a small town.

Translation seems to be the function that requires the least contextual information. In this area, interaction can usually be reduced to one interface. In the case of *Text*, the Nordic client

made contact with the translation agency through their website and, after some small translations as a sample, started a regular co-operation on a text-by-text basis. The jobs are mostly small (two or three pages) and have to be carried out within a few days or only one day. All communication takes place via email. The director of *Text* only met the client after the co-operation was well established. She decided to accompany her husband to a conference in a Nordic country and to call in on the company on that occasion.

The company *GET iT* farms out technical translation jobs to 500 translators all over the country. Only two of them do not use email, so the communication between the office, responsible for client contacts, the translators and the proof-readers is heavily supported by electronic means. No face-to-face contact is necessary. The company even gave up inviting translators to the annual Christmas party because the translators did not feel at ease literally not knowing anybody. In this case study the actual work is described as very autonomous. 'The only thing that counts is the result of your work.' (N1, p. 17)

To summarise, the following organisational facilitators seem to be the most important ones:

- *Existing contacts and support from parent or partner companies.* 'Without personal contact one wouldn't do that' (Y3, p. 1), the head of an IT department commented on the setting up of a software development unit in a Central European country.
- *Clearly delineated tasks or projects, a high degree of standardisation and formalisation.* This point was made in most of the case studies. A manager at *Globecom* put it this way: 'We are structured in such a way that we can also outsource things.' (Z3, p. 6) In some case studies it was added that high levels of standardisation and formalisation may at the same time lead to higher training needs. '*Cosmopol* have tried to formalise all options. If an agent wants to make an exception to a rule, they make a formal request to the team manager (...). On the one hand this formalisation of decision making has probably facilitated the outsourcing of work in that *Cosmopol* can hand over the rule book. On the other hand, because of the complexity of the regulations, training requirements and helpdesk support are likely to be high.' (V6, p. 5f)
- *Workers involvement in the preparation of the relocation.* Feelings of insecurity spread usually among the workforce as soon as relocation is being talked about or officially announced. Information and involvement were therefore important in many cases. This not only relates to the threat of job loss but also to possible changes in the profile of the jobs. As already mentioned in chapter 4, middle management at *Invest* concluded from difficulties faced at the source company after the relocation, that next time they would involve all concerned

workers right from the beginning. Conversely, in the *BioBelindus* case, management used the experiences of workers to better prepare the outsourcing to India.

- *Adaptation of work routines and technology to the new environment.* While high degrees of standardisation and formalisation make the relocation of work easier in general, considerable investment in defining the tasks and adapting the technology turned out to be necessary during the relocation. At *Flighty*, for example, tasks were more rigorously defined and more error-checks implemented into the technology to compensate for the lack of company-specific experiential knowledge at the destination.
- *Organisational change at source to adapt to the new division of labour.* As we described in chapter 4, outsourcing and relocation of software development may considerably change the tasks at the source company. Loss of knowledge can be a problematic consequence of the resulting increase in personnel turnover. In two cases, the relocation of part of the IT function or of software development projects rendered the source company less attractive to IT specialists. In the case of *Invest*, one team in the internal IT unit was halved through personnel turnover following the redefinition of jobs after outsourcing of development work. At *Cosmed*, the centralisation of all IT functions at the European headquarters of the international company made the experienced IT staff of the subsidiary in one Southern European country leave the company. This considerably hampered the passing on of experiential knowledge.

Failed relocation projects highlight the crucial issues. The case study on *Call4Dublin* is very instructive, as it shows what consequences can be expected if several of the preconditions mentioned above do not apply. The degree of digitisation was too low (letters to and from customers existed only on paper and were quite often missing at one end of the spatially separated activity); lack of experience at the destination location; knowledge transfer and the co-operation that were hampered by low motivation at the source company where employment was lost; and difficulties in finding the required language skills in the labour market at the destination location. The failure of part of the relocation became obvious quite soon, and after half a year some activities were relocated back.

We assume that failures are underrepresented in the case study sample because companies probably prefer to present successful measures, and consequently it is more difficult to get access to companies that encountered failures in their attempt to relocate *eWork*. Nevertheless, there were other cases such as *Call Bank* where the technical infrastructure at one rural location turned out to be insufficient and where logistical problems cropped up. This led to the further relocation of the customer service unit to a major

city in the Southern European country. *SCF* could not achieve its aim of centralising all its accounting activities at one location in a Southern European country because people working in one province and a major city in another Southern European country were not prepared to move to the capital city, and the collective agreement made it impossible to force them to do so. The way around this problem chosen by the management was to replace incrementally the existing workforce with younger people and in this way to achieve an organisation culture more favourable to geographical mobility.

Nearly all case study reports highlight the crucial role of new information and communication technologies for relocating work. This is obvious in a way, because we are dealing with the relocation of *eWork* that would not exist without this technology. However, the role of technology and the character of the required technological infrastructure is much more specific than this. Regardless of the business function concerned, the dissemination and frequent use of electronic mail makes a big difference in day-to-day communication. Although the telephone and face-to-face meetings play an important role also in co-operating over distance, most of the respondents stated that the major part of the information flow is based on email. The importance of other ICT applications varies according to the function and the way the work is organised. As already mentioned above, spatially dispersed but organisationally integrated customer service units depend on a high level of technical integration. This implies a common technical infrastructure and the ability to work on the same information systems. But also software development, accounting or design functions often rely on information systems that can be accessed from different locations.

In relation to the research and development function, the case study on the pharmaceuticals company *Phamon* yielded the following result. 'The creation of this network model was made possible by the development of ICT, as all documentation on the research conducted and connected activities must be transmitted promptly. Essentially this documentation is as follows: data, reports, clinical research on the potentiality of a drug, communication between groups abroad, dossiers, messages and communication necessary for the activities. So there is a considerable quantity of material that cannot be transmitted in an alternative way as it would take too much time and would be more costly. Often these are extremely important or confidential documents.' (S2, p. 7)

While some of the companies studied have their own telecommunication network or use dedicated lines for data transmission, small companies make use of the Internet for co-operation over distance. The multimedia company *Compass*, for example, operates an 'extranet' in the form of a 'secure slice of the Internet' for telecooperation. Producers, partners, subcontractors

and clients have differentiated access to documentation or work in progress put on the website. This greatly facilitates concurrent working from different locations.

Some of the case studies revealed that the high requirements on telecommunication infrastructure for the location of call centres, for example, are not met everywhere. As already mentioned in chapter 3, particular problems occurred in remote areas such as a Southern European island and northern regions of Nordic countries, as well as in one CEE country. In India, unreliable electricity supply seems to make the technical infrastructure insecure. This is why experienced software companies invested in electricity generators when setting up Indian subsidiaries. Without going in to too much detail here, we can state that the popular argument that *eWork* today can be relocated virtually anywhere on the globe is a drastic exaggeration even if we only look at the telecommunications infrastructure. Rather, the EMERGENCE case studies show that weak telecommunication infrastructures can make relocation fail. In contrast, it was often seen as a big advantage to be physically close to customers, thus making it possible to link up by means of a dedicated broadband line, or to have one's office near an Internet provider. The relocation of call centres from a Southern European country to the north of Morocco is only feasible, for example, because of the existing fibre optic cables under the streets of Gibraltar. It is therefore no surprise that in most relocation projects the location's telecommunication infrastructure is on the top of the checklists.

5.2 Organisational and technological solutions

In most cases the relocation of *eWork* results in more or less intensive co-operation between the source and the destination companies or establishments involved. While this is quite obvious for the types of decentralising and expanding relocations, similarly the concentration of activities at one location usually implies changed but ongoing interrelations between, for example, centralised IT or customer service units and dispersed subsidiaries of the company. The EMERGENCE case studies therefore yield interesting results relating to the organisational and technological aspects of co-operation over distance. On top of this, the findings point out current trends in organisational change.

In this context, it should be mentioned that in some cases it was the very aim of the relocation to bring about organisational change. For example, the owner and managing director of the company *Himmelblau* wanted to get rid of middle management that he saw as the cause of the troubles the company was in. It was though that an exchange of personnel would bring about the much needed increase in productivity. The relocation of large parts of the company, including production, from the metropolitan area in the north to the south of the country was the chosen means

of achieving this goal. In other cases, company headquarters aimed at increasing the degree of standardisation of work between their operations. Geographically centralising activities such as customer service was seen by the management of *Parcel*, for example, as a measure to overcome the diversity of procedures of the various national offices. The same goes for *Cosmed*, a manufacturing company, where headquarters aimed to improve reporting procedures and enhance managerial control by establishing a central computing centre at the headquarters' location and by assigning to it reporting tasks that were previously done at the individual subsidiaries. At *Cassandra*, an SME in the IT sector, the person in charge of the development of customised software advocated the move of this function to the south of the country not only for personal and market reasons, but also on the grounds that this function 'couldn't breathe' at the old location because of the dominance of a large department for standard software products. Spatially separating the functions was seen as a precondition for the growth and success of the unit for customised software. All these examples show that it would be simplistic only to look at organisational change as a side effect of relocation. Sometimes the objective of changing the organisational structure can be the core motive which triggers relocations.

Overall, the relocation of work is seen by many of the respondents as something that has to be learned. In the majority of our cases the relocation was organised as a formal project. This usually meant that a project manager was appointed, a budget was defined and the timing was planned in detail. At *TNT*, a Nordic Internet company, even a formal process relating to how units were to be relocated was developed. Nevertheless, the relations between source and destination and the concrete work organisation only evolve over time and can hardly be determined once and for all within a formal relocation project. Some of the respondents pointed to the process character of relocations: as we mentioned in the outset of this report, only some of the relocations follow the pattern of jobs being moved from location A to location B. Similarly, the temporal dimension of relocation processes is often not clearly determined. Sometimes the shift of *eWork* is not a one-off project but rather develops over time. '*Bio* wants to take the time to explore the relationship with the Indian software unit and find out the best way to steer and monitor the work from distance: "There's no use in starting with 20 Indian IT specialists if you can't monitor them adequately; we wanted to start small and explore if and how the remote team can gradually be extended".' (W2, p. 8) As we recounted in chapter 4, the role of remote units or outsourcing partners for software development tends to change over time and to become more autonomous. Even though customer service units have to be set up more or less at once, the gaining in importance of remote units can also be observed in this function.

Regarding the organisational and technical solutions, the case studies yielded interesting findings relating to the manner and the degree of integration between units or tasks at source and destination. With the exception of the special cases where the source only sends clearly defined orders (exemplified here by translation) and that are carried out autonomously by workers at the destination, the division of labour and the forms of co-operation and communication have to be decided upon and are developing after the initial relocation. What becomes very obvious from our findings is that the degree of integration between source and destination units is not directly related to the formal nature of the relationship, *ie* outsourcing or in-house relocation. While units of an outsourcing service provider may be controlled directly by management at the source and there may be close co-operation over distance, relocated units of the same corporation may enjoy a high degree of autonomy. Outsourcing is therefore an indicator of limited use when it comes to assessing the actual organisation of work. We illustrate this point with an example taken from the customer service function.

Cosmopol and Aircall

Cosmopol outsourced part of its call centre to the independent company Aircall. Nevertheless, not only is the rule book and the staff training provided by Cosmopol but also the actual work is also carried out under their close surveillance. In addition, the technical support is provided by Cosmopol and a technician flies in if, for example, a hard disk has to be changed in one of the workstations. Aircall actually only provides the office space and the employment contracts. A Cosmopol manager 'did mention the fine line which had to be taken between being inclusive of the new [Aircall] agents and making them feel part of the team, while at the same time making it clear to them that they are employed by [Aircall] and not by Cosmopol' (IR 1, p. 10) The work, incoming calls from customers, is divided on a temporal basis and by quantity: 50 percent of the calls are automatically switched to either the internal or the outsourced call centre and all calls early in the morning and on Saturdays are covered by the internal call centre at the source. This means that the two spatially separated units are highly integrated in terms of technology. Not only must all workers have access to the same information, they must also pass on information by way of entries into the information system ('attention next agent').

Of course the necessary degree of integration through information technology differs according to the function. Some relocated call centres need full integration in the sense of real time access to the company's or client's information system. Data on customers, product information or inventory levels have to be looked up, and data on the transaction or the customer contact must be entered. This is not only necessary for subsequent activities in other departments such as sales, shipping or accounting; customer service itself often needs to be able to retrieve information on earlier conversations with customers. In cases of high levels of technical integration, data transmission can be a bottleneck. In the

case study on *Qualicall* it was mentioned that the link-up with client companies is much easier and less costly after the move to the capital city, although the previous location was only 50 kilometres away. But even within the function of customer service we find differences in the division of labour between the spatially separated units, which impact on the necessary degree of technical integration. At *TNT*, for example, the business customers are cared for at the headquarters of the company and not at the relocated call centre. This division of labour according to groups of customers reduces the required level of organisational and technical integration.

Case studies on the software development function revealed a great variety of organisational designs. Regarding the division of labour, the work can be assigned to the different units according to types of projects, or according to stages in the development process. The main types of projects are first those that result in saleable, 'off-the-shelf' software products and second those developing company-specific software according to the specification by the customer. The main stages of the development process are requirement specification, design, coding, and testing. These stages can be spatially separated, and quite often they are. *Crownsoft*, for example, initially kept customer contact, requirement specification and project management entirely at their original location. Some of the relocated new units in central and eastern Europe were assigned mainly coding tasks. As already described in more detail in chapter 4, companies relocating software development to India usually prefer to assign complete development projects to the Indian unit in order to, among other things, make the work more interesting. It is, however, much easier to relocate product development projects which do not require intensive interaction with customers. That is why *Bio* kept other kinds of projects in their internal IT department in the Benelux. *Globecom* on the other hand practices a higher degree of division of labour between the European and the Indian unit, as can be seen in the following overview.

Division of labour at Globecom

'*Requirement specification*. The draft is being made by the [source country's name] solutions owner. If it is a customer-triggered project, sometimes he and an Indian engineer travel to the customers' premises. The Indian team members comment and the solutions owner consolidates this into a final specification. Project planning is made together, including setting priorities (...). Budgeting is made co-operatively (involving the project managers on both sides), but the [source country's name] solutions owner has the decisive authority.

Design. The final decision on high-level design (architecture) is made by the solutions owner. Low level design is carried out in India. Sometimes the [source country's name] solutions owner will also design a part. He also reviews the design documents regularly.

> **Coding** This is always done in India. Peer-to-peer-review by the Indian team members, in some cases support by the [source country's name] solutions owner.
>
> **Testing** Unit and system testing in India; functionality test — dependent on where the respective testing equipment is standing — by the Indian team, by the solutions owner in [source company's country] or at the customer's site.' (Z3, p. 9f)

A high degree of technological integration can be found, even in cases with rather high levels of division of labour. At *Crownsoft*, for example, equal access to all information is considered to be very important. 'Colleagues at other locations have access to the company's intranet. They have direct access and don't have to take detours.... It is important that they can access all the same electronic information as we can here.' (Y5, p. 7) This integration often implies a common technological infrastructure regardless of location.

Centralised information systems are not only important technological features in the customer service and software development functions. Two case studies on the relocation of research and development units point out the strategic role of central databases. At *Citrus*, a telecommunications company, the headquarters provide databases and programmes for all projects of the spatially dispersed R&D units. Information and documentation is collected centrally and distributed to the units. As already mentioned, *Phamon*, a pharmaceuticals company, has to distribute large quantities of information such as data, and reports on clinical research, among its R&D units and research partners. In this sector the demands on documentation are particularly high. Currently, a knowledge management project is under way 'whose objective is to create a databank containing all the documentation so that the entire group can discuss, exchange and share information if and when necessary.' (S2, p. 7)

In all sectors, integrated computer systems in the form of enterprise resource planning (ERP) systems are gaining importance. They support the centralisation and standardisation of information processing and thereby make the delocalisation of work easier. Some of the case study companies already used, or had recently introduced, the system from SAP, one of the leaders in the ERP-market.

'There is intensive co-operation with [region a+b]. An invoice is registered in [major city], accounted in [region a], paid in [region b] by means of a SAP system. This is an integrated management application and was costly to set up. "The integration presupposed changes because this was preceded by the integration of the SAP computer system. Now, for the purposes of accounts and finance, all the companies of the group have the SAP computer system. (...) The new technologies mean that the physical location is what counts least. Here the [company] has

competence for [major city], the [region a] factories and for [region b]. The accounts and all the financial issue in [region b] is done from here by computer connections. These days what counts least is where you have your office – communications allow for more and more distance work."' (Human Resource Manager, T2, p. 8f)

Cosmed centralised the IT and accounting function at their European headquarters. They also use SAP as a means to standardise and harmonise the information flow between the subsidiaries and the headquarters. The main point of using ERP systems in this respect is that information is not exchanged via electronic communication in a format-free form any more. Rather, information has to be entered in a comprehensive and standardised way and can then be used for all the purposes for which it is needed in the whole company. It was also the experience at *Himmelblau*, a manufacturing SME, that business management software is being used much more intensively since the relocation of parts of the company. 'While a lot of information circulated directly (via verbal communication or on paper) between the departments, now all information is made accessible through integrated computer systems. This in particular relates to the communication between the spatially separated parts of the company with the departments for development, procurement and sales.' (F2, p. 7)

The general picture that emerges from these experiences is that relocations that create or intensify co-operation over distance trigger organisational and technological change processes leading to higher levels of formalisation and digitisation of information and communication. While in some rare cases this is, as already mentioned, the very aim of the relocation, in most cases it is the outcome of relocation projects. The core aspects of this change relate to the transformation of tacit, experiential knowledge into objective knowledge and the move to comprehensive documentation, and thereby digitisation of information relating to customer contacts, products, projects *etc.* To give an example from software development: 'If you order something from abroad it has to be described very well, the requirements must really be determined, an excellent interface has to be defined. You need well-established procedures and a good development method. If you have this there is no problem. On the contrary, cross-border co-operation forces the partners to proceed more systematically.' (Y5, p. 15)

Notwithstanding the achievements of knowledge management projects, the case studies also pointed out the limitations of such a formalisation and digitisation of information. In the case study on the customer service of a Nordic Internet company this was expressed in the following way: 'The unit offers IT support in the form of computer systems in which staff input information on each customer case. This information can then be retrieved the next time the customer calls. This is a form of information or knowledge transfer between staff. However, the greatest knowledge within

the departments is considered to be held by individual staff members in the form of tacit knowledge.' (M2, p. 13)

In spite of considerable differences between the case studies regarding the importance of telephone and face-to-face meetings, we can conclude that there are considerable limitations to the full replacement of direct communication by electronic information exchange. Rare are the cases where people co-operating over distance fully rely on electronic communication: 'I have never heard his voice', one of the respondents in the *Intermed* case study said about his subcontractor in another country. (Q1, p. 15) This rather exceptional experience can be accounted for by the fact that well-defined programming tasks were outsourced in this case. Usually, however, personal meetings are considered to be a very important basis for successful co-operation over distance. 'Once they saw that I didn't have two heads things instantly improved', as an respondent at *Brandfree* put it. (V6, p. 10) There was a similar experience in many of the companies studied. At *Globecom* face-to-face meetings are rare because of the large distance between Europe and India, but they are considered indispensable: 'Direct personal contact is a criterion for success. If this isn't there, it fails. Only telephone, email and voice-mail – that doesn't work. One has to meet regularly.' (...) The [source country] project manager tells how his first visit to India facilitated the subsequent tele-collaboration: 'Before, everyone put off problems for a week until the next teleconference.' After having met face-to-face and since instant messaging was installed, the Indian developers do not hesitate anymore to ask questions or to report if they find any faults.' (Z3, p. 8) At *Softwork*, a relocated software development unit of a company in a CEE country, a respondent argued: 'New employees find it difficult not to have any personal contact.' (Q3, p. 9) These experiences have led some companies to establish regular meetings, not only for people involved in the same projects.

5.3 Employment aspects of relocations

The quantitative effects on employment, *ie* the numbers of jobs lost or gained at a particular location, depend on the type and the scale of the relocation project. As explained in more detail in chapter 2 of this report, there are two types of relocation that by definition result in job losses at the source location: concentration of activities in the context of company reorganisation and replacement relocations as isolated measures. Some of the relocations concern a considerable number of jobs. At *Sporty*, a total of 250 jobs were lost at various national subsidiaries (and gained at the location of the European headquarters). The relocation of the call centre of *Call4Dublin* meant a loss of 72 jobs in a central European city. *Qualicall's* move to a major city eliminated 50 jobs in a small town. *Phamon* reduced its R&D personnel by 150 by means of outsourcing and relocation, creating

only eight jobs in a relocated in-house unit. At *Flighty*, 60 jobs were lost in an accounting department after relocating to India, *etc.* However, reduction of jobs at the source location did not in all cases lead to redundancies. Sometimes, employees were transferred to other jobs in the company and sometimes they were given the option or even encouraged to move with their jobs to the new location. If there were redundancies, negotiations on the terms were frequently started that partly led to social plans determining severance pay, for example.

Himmelblau

This family business employing some 35 workers moved its procurement, production and R&D departments from a metropolitan region to the south of the country. One-third of the workforce remained at the original location dealing mainly with sales activities, one-third moved to the south of the country and the remaining third left the company. For these redundancies, a social plan was negotiated. Some of the managers and workers have to travel between the locations on a weekly basis for meetings. The management hopes that part of the travelling can be replaced by video-conferencing. A new ADSL connection makes this kind of communication possible.

The positive employment effects at destination locations are usually limited if we look only at individual cases of relocations. The total job creation through the location of *eWork*, however, may be considerable. The central and eastern European countries and India are gaining employment in particular through the relocation of software development. The expansion of *Crownsoft*, for example, resulted in the establishment of companies in several CEE countries with several hundreds of workers each. It can be observed that cities and metropolitan areas are gaining most, while smaller towns only appear to attract IT jobs if they have an important university. Job creation through the location of call centres also favours large cities if language skills for pan-European customer service and a large pool of flexible labour are required. But the case studies also revealed a trend in the opposite direction: Mono- or bilingual call centres were also set up in, or relocated to, rural and peripheral regions where labour turnover and wage levels are lower. In rare cases these locations were favoured by government policies.

5.3.1 Call for mobility

At the outset of the EMERGENCE project, we conceived relocation of *eWork* as a shift in tasks or jobs, with workers at one location losing and workers at another location gaining employment. What we certainly underestimated was the movement of people involved when it comes to the relocation of *eWork*. We now briefly summarise the findings on the mobility of workers in relation to relocation processes. In cases of concentration or replacement relocations, some of the source companies offered employment in the new location to the workers

affected by the measure. *Sporty* and *Parcel* actively encouraged workers to move in order not to lose know-how and expertise important for customer service. In other functions too, such as R&D, workers relocated with their jobs, as the case studies on *Himmelblau, Phamon, Bugdom* or *Citrus* show. Conversely, and as illustrated by a Southern European case study on *SCF*, the protection of workers against involuntary mobility by labour law or collective agreements may slow down relocation processes. It was not only in in-house relocations that workers followed their jobs to new locations. In some of the case studies on outsourcing, the workers affected not only changed workplace but also employer. The logistics company *Cotral* took over the workers previously employed in the warehouses of *Technoshop*, and members of the IT department of *T-Bank* became employees of the IT company *SIS* when its IT department was outsourced.

Relocations make high demands on people's mobility. As we have just mentioned, this can be a direct consequence of relocation insofar as workers have to move with their jobs if they want to keep them. In addition, companies relocating call centres often encourage employees to move to the new location to support knowledge transfer. But there is a lot of additional mobility required: managers go abroad to set up and direct new units or companies; specialists train new workers at new locations; people co-operating over long distances travel to regular meetings *etc.* In the light of our case study findings, the popular image of *eWork* taking the work to where people live instead of people having to commute to work therefore needs qualification.

Some of the employment consequences of increasing demands on mobility are obvious: work organisation favours young, single and childless workers for jobs that involve a lot of travelling. This applies, for instance, to call centre agents taking on employment abroad and to researchers who move with relocated laboratories, as well as to project leaders who have to visit relocated software development units on a regular basis.

5.3.2 Consequences for the quality of work and conditions of employment

As far as qualitative employment consequences are concerned, case studies on the relocation of software development or IT support reveal that quite often the content of work changes at the source company. Sometimes this is because in general it is coding tasks which are relocated to units abroad, and sometimes because development work is outsourced while requirement analysis and project management are kept in-house. This may result in an upskilling of work. But it can also create considerable problems, as described in more detail in chapter 4. At *Invest*, for example, software designers who disliked the changing profile of their jobs left the company. A similar situation emerged after the relocation of IT tasks from a Southern European country to a new,

centralised IT unit at the headquarters of the *Cosmed* group. For those workers who moved with their jobs and changed employer in an outsourcing process, the terms and conditions of employment were subject to negotiation and change. This was a particularly controversial issue in a Southern European country where sector-level collective agreements with considerable differences in pay levels exist. As described above, the workers and trade unions at *T-Bank* prevented a changeover from the banking to the engineering collective agreement in the negotiations with the source company and its outsourcing partner.

In cases when outsourcing is cost-oriented, relocation bears a much greater risk of resulting in poorer employment and working conditions. This not only relates to wage differentials, which are the driving force of some types of relocation. Quite often, higher levels of flexibility were observed at destination establishments. This relates to working hours but also to employment security. At *Qualicall*, the very aim of the relocation was to recruit workers willing to accept highly variable and partly unsocial working hours. In some cases of transcontinental relocation, workers at the destination, in particular in India, compensate for the time shift through night work to make communication with European colleagues easier. In other cases, a deterioration of terms and conditions results from outsourcing from the public to the private sector or by changing collective agreements.

5.3.3 Security and sustainability of created jobs

One important question relates to the security of new jobs that are created by the relocation of *eWork*. In software development, Central European countries have already begun to fear that companies may move on to regions or countries with lower wage costs. This was reported, for example, in the case study on *Betty*: 'The company does not exclude the option of relocating its operations to other markets, especially eastern markets: Russia, Ukraine, Estonia. (...) "It is possible that our [source country] partner will focus on these markets in the future. This would have negative consequences for us. I would say even more: it is very likely that they will focus on other countries".' (N4, p. 11) Such a move east is already happening as companies circumvent labour market competition in cities such as Prague and Budapest. So far, however, the companies still seem to be expanding and therefore employment is not reduced in the Central European cities.

There are differences in the time perspective and sustainability of employment according to the types of relocation described in chapter 2. Concentration of activities such as IT, customer service or R&D, especially if they are in-house, are planned to be permanent. Decisions such as establishing a central customer service unit at *Sporty's* European headquarters or centralising all IT functions at *Cosmed's* headquarters are not likely to be reversed. The same is true for the centralisation and amalgamation of R&D

units in the pharmaceutical and chemical industries, which goes hand in hand with the closure of many of the laboratories. However, there are some qualifications to be made: centralised units may face recruitment problems and this in turn may trigger decentralisation. But there is obviously no immediate threat to the jobs there. For this type of relocation it is more relevant that corporate restructuring or mergers between companies may put into question the organisational solution. This means that the very processes that led to the creation of centralised units, *ie* capitalising on possible synergies often after takeovers or mergers, may be repeated at a higher level, and new processes of restructuring may start.

The situation is completely different for units that emerged from decentralising or complementary types of relocations. The creation of employment in remote establishments was meant to add capacities to the ones existing at the source company. As a consequence, these additional capacities or jobs may be reduced again if and when the need vanishes, for example, because demand is declining. Outsourced customer service units are particularly vulnerable in this respect. As the manager of *Minicall* mentioned, the problem is not only that the customer companies belong to the volatile telecommunication industry but that, in case of lower demand, they would discontinue the contract with *Minicall* rather than making redundant their own employees in internal call centres. Many call centre companies offer to take care of the 'overflow' from their customers' internal customer service centres. This implies that they only cover peak demand, and that employment is thus less secure. In the related case studies on *Cosmopol, Brandfree* and *Aircall*, it became obvious that the source company *Cosmopol* is likely to take work back to the internal call centre in Dublin if business goes down or if the shortage of foreign language agents on the local labour market eases.

References

Castells M (1996), *The Rise of the Network Society*, Blackwell, Malden and Oxford

Dicken P (1992), *Global Shift. The Internationalisation of Economic Activity*, Paul Chapman, London

Dunning J H (1993), *The Globalization of Business. The Challenge of the 1990s*, Routledge, London/New York

Esping-Andersen G (1990), *The Three Worlds of Welfare Capitalism*, Polity Press

Huws U (1999), 'Material World: The Myth of the "Weightless Economy"', in: *The Socialist Register 1999*, Merlin Press, Woodbridge, 29-55

Huws U, O'Regan S (2001), *eWork in Europe: Results from the EMERGENCE 18-CountryEmployer Survey*, IES Report 380, Brighton

Kogut B (1985), 'Designing Global Strategies: Profiting from Operational Flexibility', *Sloan Management Review*, Vol. 26, 27-38

Piore M J, Sable C (1984), *The Second Industrial Divide*, Basic Books, New York

Annex 1: Overview of EMERGENCE Relocation Cases

No. of rel. case	Nickname[1]	Function[2]	Sector (of source company)	SME[3]	Outsourcing: yes/no	Geographical dimension	Number of jobs involved[4]
1	*Teleco* (Q4)	1) Telesales	Software, IT and telecommunications		No	Transregional: *Major CEE city > Virtual Sales Centre*	New jobs: *+ 15*
2	*Webnet* (S1)	1) Sale and supply of advertising space on the web	IT		Yes	Transregional: *Major city in a Southern European country > Major city in the north of the country*	New jobs: *+ 40*
3	*Archi* (V1, M5)	1) Marketing	Architecture	☑	Depends on project	Cross-border: *Nordic country > Another European country*	Mainly new jobs that are difficult to quantify
4	*Minicall* (Z1)	1&2) Customer Service and Telesales	Telecommunications		Yes	Transregional: *Major city in a central European country > Another major city*	New jobs: *+ 6*
5	*Qualicall* (Y4)	1&2) Customer Service and Telesales	Call Centre	☑	Yes	*Transregional:* Small provincial town > Major city in a central European country	- 50 + 85 and continually increasing
6	*Cosmopol* (U1) > *Brandfree* (V6)	2) Customer Service – Flight reservations	Airline		Yes	Cross-border: Dublin > English speaking country	*No jobs lost at source;* + 20

1 Nicknames were adopted for all companies involved in the fieldwork in order to ensure anonymity to them.

2 1. Telesales; 2. Customer Service; 3. Data processing, typing & other forms of data input; 4. Creative functions (Design, editorial and other forms of creative or content-generating work including research and development; 5. Software development, IT maintenance and support; 6. Accounting, debt collection and other financial services; 7. Human resources management and training

3 Less than 200 employees at source company.

4 Lost through relocation or not filled locally, *ie* jobs that could have been created at the source location but are now at the destination location instead. Transferrals from source > destination are included in these numbers; full- and part-time jobs.

No. of rel. case	Nickname[1]	Function[2]	Sector (of source company)	SME[3]	Outsour-cing: yes/no	Geographical dimension	Number of jobs involved[4]
7	*Cosmopol* (U1) > *Aircall* (Y2)	2) Customer service – Flight reservations			Yes	Cross-border: *Dublin > Major city in a central European country*	No jobs lost at source; *+ 9*
8	*Cella* (T3)	2) Customer Service	Telecommunications		Yes	Transregional and cross-border: *Southern European country > Another region and Northern Morocco*	New jobs: + 400 in Europe + 2000 in Africa
9	*TNT* (M2)	2) Customer Service	Telecommunications/ Internet services		No	Transregional: *Major city in a Nordic country > Small town in a northern region of this country*	*- successive replacement of departing employees by agency staff* + 12 in 1997, +110 by now
10	*Tourgoff* (Z4) > *Eurocall* (X3)	2) Customer Service	Tourism	■	Yes	Cross-border: *From 10 European offices to one European country*	New jobs: + 40
11	*Call Bank* (S3)	2) Customer Service	Financial Services		Yes	Transregional: *Major city in the north of a Southern European country> Major city in the centre of this country*	New jobs: *+ 42*
12	*Call4Dublin* (W1)	2) Customer Service	Financial Services		No	Cross-border: *Major city in a central European country > Dublin*	*- 72* *+ 60*
13	*Sporty* (W4 & 5)	2) Customer Service	Retail		No	Cross-border: *From all over Europe > Metropolitan location in Benelux country*	*- 25 in one central European country* *+ 250 in total*
14	*Parcel* (M3&4, X2)	2) Customer Service	Logistics		No	Cross-border: *4 national units > town in Nordic country*	*- 10 to15 in each unit (40-60 in total) + 40 in total*
15	*Lecky* (V5)	2) Customer Service	Utilities		No	Transregional: *6 CCs established > 1 virtual CC*	New jobs: *+ 1,400*
16	*Individual Insurance Agency IIA* (M1)	2) Customer Service	Public sector		No	Transregional: *Metropolitan area in a Nordic country > 2 towns in a more rural part of the country*	New jobs: *+ 50, +50*

No. of rel. case	Nickname[1]	Function[2]	Sector (of source company)	SME[3]	Outsourcing: yes/no	Geographical dimension	Number of jobs involved[4]
17	*Hub* **(V4)**	2) Customer Service	Public sector		No	Transregional: *22 CCs*	New jobs: *+ 1000 nurse advisors* *+ approx. 500 call handlers*
18	*GovContact* **(W3)**	2) Customer Service	Public sector		Yes	Transregional: *Major city in the Benelux > Benelux region*	New jobs: *+ 26*
19	*Madadata* **(V1)**	3) Data-processing	Business services		Yes	Cross-border/-continental: *Major city in a European country > Madagascar*	New jobs: *+ 200*
20	*JOE* **(O3)**	3) Data-processing	Business services	■	Yes	Transregional: *Between two regions in a CEE country*	New jobs: *+ 3*
21	*SCC* **(O2)**	3) Data-processing	Research and consulting	■	No	Transregional: *City in a CEE country > Rural area*	New jobs: *+ 3*
22	*Cabel* **(N3)**	3) Data-processing	Manufacturing	■	No	Transregional: *City > town (in a CEE country)*	New jobs: *+ 105*
23	*T-Bank* **(S5)**	3&5) Data processing; software development and IT services	Financial services		Yes	Transregional: *Major city in a Southern European country > Other region*	*- 240* *+ 240*
24	*Handitech* **(N2)**	4) Creative functions	Training	■	No	Transregional: *Between two regions in a CEE country*	Not possible to quantify in terms of created jobs
25	*Microweb* **(T1)**	4) Creative functions	Software, IT support and telecommunications	■	Yes	Transregional and cross-border: *Different countries and regions > Major city, its periphery and one specific region (in a Southern European country)*	New jobs: *+ 66 in the city* *+ difficult to quantify, at peak times up to 200*
26	*Compass* **(V2)**	4) Creative functions	Public sector		Yes	Transregional: *Major city > Other region*	*No jobs lost at source;* *8 jobs secured at destination*
27	*Phamon* **(S2)**	4) Creative functions	Pharmaceutical		No	Cross-border: *City in a Southern European country > central European country*	*- 150* *+ 8*

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No. of rel. case	Nickname[1]	Function[2]	Sector (of source company)	SME[3]	Outsour-cing: yes/no	Geographical dimension	Number of jobs involved[4]
28	*Childy* **(W7)**	4) Creative functions	Publishing	■	Yes	Cross-border/-continental: *Benelux country >* *Singapore (and Hong Kong)* *+ vice versa*	Mostly new jobs: *+ 4 (at source company)* *+ could not be found out at destination*
29	*Himmelblau* **(P2)**	4) Creative functions	Manufacturing	■	No	Transregional: *Metropolitan area > South of the country*	*- 18* *+ 33*
30	*Citrus* **(P4)**	4) R&D	Telecommunications		No	Cross-border/-continental: *Seven cities in a European country> Silicon Valley (USA)*	*- 10* *+ 30*
31	*Bugdom* **(P5)**	4) R&D	Pharmaceutical industry		No	Cross-border: *Middle and big sized towns > towns/cities in another European country*	*- 100*[1] *+ 100*
32	*Translate* **(N1)**	4) Translations	Business services	■	Yes	Transregional: *Major city in CEE country > Subcontractors in different regions*	New jobs: *+ 500*
33	*Text* **(U2)**	4) Language editing	Business services		Yes	Cross-border: *Several European countries > Ireland*	*None*[2]
34	*Secure* **(W4)**	5) Software development	Banking, insurance and asset management		Yes	Cross-border/-continental: *Europe (mainly one Benelux country) >* *India (Mumbai, Chennai, Bangalore, Delhi* etc.)	*- 65* *+ 65*
35	*RegioBank* **(X1)**	5) Software devt + IT services	Banking		Yes	Transregional: *Regional area > Metropolitan area*	*- 30* *+ 320*
36	*Cassandra* **(P3)**	5) Software development	Software, IT support and telecommunications	■	No	Transregional: *Metropolitan area > City in the South of the European country*	*- 2* *+ 2*

1 30 employees were transferred to one European country; 30 were transferred to another site in an English-speaking country; 40 were made redundant.

2 Work does not amount to an entire job but three jobs supported within company by similar transnational outsourcing.

No. of rel. case	Nickname[1]	Function[2]	Sector (of source company)	SME[3]	Outsourcing: yes/no	Geographical dimension	Number of jobs involved[4]
37	*ITcomp* (Z5)	5) Software development, IT services	Manufacturing		Yes	Transregional: *From one big city in a European country to another*	*- 35* *+ 1*
38	*Invest* (Z2)	5) Software development	Business services	■	Yes	Cross-border/-continental: *Major city in a European country > Major city in the United States*	*- 6-8* *+ 8-12*
39	*Globecom* (Z3)	5) Software development	Software, IT support & telecommunications		Yes	Cross-border/-continental: *One European country > Bangalore (India)*	*- 6* *+ 7*
40	*BioBelindus* (W2)	5) Software development	Software, IT support & telecommunications	■	Yes	Cross-border/-continental: *Benelux country > Chennai (India)*	*- 6* *+ 6*
41	*WebMagy* (W8)	5) Software development	Software, IT support & telecommunications	■	Yes	Cross-border: *Various locations (virtual companies) in the Benelux > Major city in a CEE country*	*- 12* *+ 14*
42	*Betty* (N4, Y3)	5) Software development	Entertainment		Yes	Cross-border: *Major city in a central European country > Major city in a CEE country*	*- 1* *+ 17*
43	*Crownsoft* (Y5) > *Dunasys* (Q2)	5) Software development	Software, IT & telecommunications		No	Cross-border: *Major city in a European country > Major city in a CEE country*	*- 35* *+ 450*
44	*Intermed* (Q1)	5) Software development	Software, IT & telecommunications	■	Yes	Cross-border: *European country > City in a CEE country > Western Siberia (Russia)*	New jobs: *+ 6 in CEE country* *+ 11 in Siberia*
45	*Softwork* (Q3)	5) Software development	Software, IT & telecommunications		Yes	Transregional: *City > Region in a CEE country*	New jobs: *+ 35*
46	*Cosmed* (R2)	5) IT function including software development	Pharmaceutical industry		No	Cross-border: *Southern European country > Central European country*	*- 3* *+ 28*
47	*Paul* (R3)	5) Software development	Software, IT support & telecommunications		No	Cross border: *Southern European country > Ukraine*	New jobs: *+ 10*

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No. of rel. case	Nickname[1]	Function[2]	Sector (of source company)	SME[3]	Outsourcing: yes/no	Geographical dimension	Number of jobs involved[4]
48	*Flighty-Coup-Mum* **(Y1)**	6) Financial and accounting services and data-processing	Airline		Yes	Cross-border/-continental: *Major city in a central European country > India*	*- 60* *+ 130*
49	*SCF* **(T2)**	6) Financial and accounting services	Manufacturing		Yes	Transregional and cross-border: *Various regions > Two major cities in Southern Europe as well as one province*	No dismissals[1] at source *+ 32*
50	*Telehealth* **(R1)**	7) Medical Services	Public sector		No	Transregional: *Major city in Southern Europe > Various remote Health Centres on islands*	New jobs: *+ 65*
51	*Safe* **(V3)**	7) Health and safety consulting	Private sector serving all sectors		Yes	Transregional: *Between two regions*	New jobs: *+ 100 and increasing*
52	*Labour Office* **(O1)**	7) Human Resources	Public sector		No	Transregional: *From one town in a CEE country to another*	New jobs: *+ 13*
53	*Global Management Services/GMS* **(M6)**	7) Human Resources	Consulting	■	No	Transregional: *From one major Nordic city to another*	*- 3* *+ 3*
54	*Technoshop* **(S4)**	Logistics	Software, IT support and telecommunications	■	Yes	Transregional: *Between two regions in a Southern European country*	New jobs: *+ 40*

[1] Job losses couldn't be easily identified due to 'reabsorbation' of employees in other sectors of the group or early retirement schemes.

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